A Clinical Lecture

ON

SYPHILITIC ULCERATION AND SOME OTHER DISEASES OF THE RECTUM;

WITH REMARKS ON THE TREATMENT OF HÆMORRHOIDS.

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GENTLEMEN,—As there are at present in the hospital several instructive cases of disease of the rectum, and as diseases of this part of the bowel are of very common occurrence, it may, I think, be useful to take some of these cases as the text of a clinical lecture.

CASE 1.—The first patient to whose disease I will direct your attention is a young woman in Princess Ward, who is the subject of syphilitic ulceration of the rectum. She complains of pain before, during, and after defecation, and of troublesome constipation. These symptoms are of about five months' duration, and were preceded by a dull red rash over the body and some soreness of the throat. Examination of the rectum with the speculum revealed numerous superficial ulcers, which were mostly above the sphincter, but there was one rather deeper ulcer with indurated edges which was immediately within the anus and extended to the junction of the mucous membrane with the skin. The skin round the anus was red and irritable and the anal folds somewhat thickened. There were superficial ulcers on both tonsils and a fading brownish roseolous rash over the trunk. There was slight, firm enlargement of the cervical and inguinal lymphatic glands. The patient was given two grains of grey powder three times a day; an incision was made to the depth of about a quarter of an inch through the base of the anal ulcer, and a suppository of grey oxide of mercury ointment introduced twice a day into the rectum. Under this treatment you will have observed that the ulcers of both rectum and throat have nearly all healed. She is free from pain, and the bowels act without discomfort or difficulty. In this case, as so often happens, we were not able to obtain a distinct history of syphilitic infection; but the rash upon the skin, the ulceration of the throat, and the amygdaloid enlargement of the glands, together with the characters of the rectal ulcers, made the diagnosis of syphilis sufficiently easy and secure. You will observe that this patient complained of pain alike before, during, and after defecation; and this led us to suspect that there was ulceration extending along the rectum to some distance above the anus. The case contrasted well with that of another woman on the opposite side of the ward (Case 2) who complained of pain during and after defecation, but who had no discomfort until the motion began actually to pass, and in whom we found a single oval ulcer at the anus, and nothing above. In Case 2 we could see the edge of the ulcer at the anus, but any attempt to introduce the finger or speculum gave so much pain and excited so much spasm of the sphincter that it was necessary for a proper examination to administer ether. You will often meet with this difficulty when an ulcer is situated just within and at the margin of the anus, where the nerve-supply is very free and the reflex sensibility very acute, whereas even extensive ulceration above the sphincter gives rise to much less pain and spasm. When, therefore, you have to examine a case of painful ulcer at the anus, give a sufficient dose of castor oil to act freely on the bowels, and then let ether be administered; and, the patient being placed in the lithotomy position, an expanding speculum should be introduced and the interior of the rectum exposed to view. As the introduction of an enema tube is often in such cases very painful, it may be undesirable to administer enemata before the examination; a syringe and warm water should, therefore, be at hand to wash out the bowel during anæsthesia, and you should be prepared at the same time to incise the anal ulcer.

The lithotomy position is much the most convenient for examining and operating upon the rectum during anæsthesia, and it can be adopted without any disagreeable exposure even in women, the lower limbs being wrapped in a loose flannel gown and a towel placed over the vulva. An extending and self-retaining speculum, made in three skeleton segments, which being separated dilate the rectum without concealing its surface, is a most efficient aid to the examination. With this instrument dilated and fixed in position the rectum can be washed out and a most complete inspection made of the mucous surface. This was the method adopted in the case before us (Case 1) and you were able to see clearly the long oval narrow ulcer with its long axis across the margin of the anus, with its hard, raised edges and its grey base. You saw, besides, that higher up the rectum and within the sphincter were a number of superficial, irregularly-shaped ulcers, of diameters varying from a quarter of an inch to an inch and coated with a whitish film. You will also have noticed that the folds of skin round the anus were thickened and, where they joined the mucous membrane, red and irritable-looking. These were conditions quite characteristic of syphilis and clearly indicating the need of constitutional as well as local treatment. The local treatment consisted in the forcible dilatation of the sphincter so as to produce a condition of temporary paralysis, the free division of the base of the ulcer at the anus and the scraping away of the granulation layer on its surface, and the application of iodoform to all the ulcers. Subsequently an ointment of grey oxide of mercury was used, but this local treatment alone would have been quite insufficient for the healing of the ulcers, which were only one manifestation among others of the general syphilitic infection. You will frequently meet with cases of syphilis in which patients consult you on account of some one prominent symptom, the connexion of which with the preceding infection they do not recognise. For this reason, or perhaps because they wish to conceal it, they do not mention the fact that they have had syphilis, so that it is the more necessary that you should recognise syphilitic symptoms, both by their individual characters and by their concomitants. It must be borne in mind, moreover, that symptoms both of syphilis and of other diseases are liable to considerable modification by the position, the tissue, or the function of the part affected. Thus in the case before us the formation of an ulcer at the margin of the anus gave rise to symptoms which were special to the position of the ulcer rather than to its origin; for the patient had the severe pain at the time of and after defecation, the spasm of the sphincter, and the constipation characteristic of ulcer of the anus. These were the symptoms exhibited in the following case.

CASE 2.—A woman, otherwise healthy, had a simple non-specific ulcer of the anus. It was an example of the vicious circle into which the habitually constipated are apt to enter. Habitual constipation is much more common in women than in men, and women suffer much more frequently than men from ulcer of the anus. This woman had been in the habit of allowing large quantities of hard fæces—which were often expelled with great difficulty—to accumulate in the rectum. For the last few weeks defecation had been accompanied and followed by great pain, and the motions were streaked with blood. The pain and the spasmodic contraction of the anus made defecation increasingly difficult, so that the bowels now only acted at intervals of several days, and then only after aperients. Doubtless the passage of hard fæces had caused a crack or fissure at the anus, and this had been prevented from healing by the repeated irritation to which it was subjected. Then, increasing in area and depth, the ulcer became irritable and painful, and gave rise to reflex spasm when an attempt was made to empty the rectum. Thus, the constipation caused the ulcer, and the ulcer kept up the constipation. For this case all that was needful was an incision through the base of the ulcer, a dressing of iodoform gauze, and the proper regulation of the bowels so as to ensure a daily soft motion.

Let me add to these cases another case of syphilitic disease of the rectum which I have recently seen in private practice, and which illustrates the value of concomitant symptoms in aid of diagnosis.

CASE 3.—A patient aged forty-eight years was brought to me for consultation on account of disease of the rectum, which it was suspected might be malignant. The history told that she had been losing flesh for a year, during which time also she had suffered with increasing frequency of defecation. For about six months she had been passing small quantities of mucus and blood, sometimes without any fæcal admixture, and she was distressed by the great irritability of the bowel and the frequent desire to empty it. She had become dyspeptic and depressed, and her complexion had undergone a notable change from that of health to a dull bistre tint.

She was very thin, and an examination of the abdomen revealed four spots of marked tenderness along the course of the colon. In the rectum, above the level of the sphincter, were several irregular, somewhat raised patches of ulceration coated with a grey film; no growth could be seen or felt. The folds of skin around the anus were much indurated. She had pain before defecation, but felt a sense of relief after the bowels had acted. I noticed that she had numerous linear scars on the edges of the lips, and on further inquiry I learned that she had suffered from ulceration of the throat, and from several circular ulcers on the legs, of which I saw the depressed, pigmented, and nearly symmetrical scars. On these facts we based the diagnosis of syphilitic disease of the bowel, and we placed the patient upon the treatment appropriate for that. After our consultation, my friend who had brought the patient reminded me of what I had forgotten—viz., that ten years previously I had treated this patient's husband for a syphilitic stricture of the urethra.

You will notice that in this case there was no ulcer actually at the anus, and therefore there was no pain attending the act of defecation. The pain was felt before the bowels acted, evidently from the irritation of fæces moving over the ulcerated colon and rectum, and when the bowel was emptied a sense of relief ensued. The relation of the pain to the act of defecation will thus often help towards the diagnosis of the *situation* of the ulcer. The diagnosis of the *character* of the ulceration will depend partly on the appearance and situation of the ulcers and partly on the concomitant symptoms. Remember that in syphilis ulceration of the rectum is very common, especially in women; and that when in a case of syphilis you see ulceration at one end of the alimentary canal (the throat) it is very probable that there is ulceration at the other end of the alimentary canal (the rectum). Thus you see superficial ulcers and mucous patches in the secondary stage affecting both throat and rectum; somewhat later, when the tonsils are infiltrated and sore; irregular, multiple ulcers with slightly raised bases and grey necrotic surface are found in the rectum; and later still, when gummatous growth and ulceration are occurring in the tonsils, the same condition is frequently met with also in the rectum. This last form of ulceration sometimes simulates malignant disease, and is occasionally almost as destructive; the diagnosis will be aided by the history and other symptoms, and by noting that the syphilitic disease is usually more scattered, and less confined to one part of the bowel, than the malignant. Multiple ulcers of the rectum, especially in young people, are mostly syphilitic or tuberculous. The tuberculous are probably not confined to the rectum; they are more apt to lead to suppuration in the adjacent tissue than the secondary ulcers of syphilis and have not the surrounding growth of those of the tertiary period. Other forms of ulceration to be borne in mind, but which will be distinguished by their concomitants, are the dysenteric, and that rather rare condition, ulcerative colitis. In the investigation, therefore, of cases of ulceration of the rectum, do not neglect to note carefully any symptoms that may help you towards a correct diagnosis of their character, and remember that in none is the ulceration of the bowel to be considered as a mere local disease. Even in so simple a case as the second of those I have brought before you, the due regulation of the bowels was as essential as the local treatment for obtaining a cure, and in the first and third cases, without the recognition of their syphilitic origin, treatment would have been entirely futile. The treatment, then, of syphilitic ulceration of the rectum must be constitutional as well as local. For the first, mercury is almost always necessary, but inasmuch as many of the subjects of this condition are dyspeptic, anæmic, and ill-nourished the administration of mercury should be combined with iron or other tonics and with careful feeding. In the later stages, and in the cases of gummatous ulceration, iodide of potassium should also be given. I think, as a rule, small doses of grey powder, with a little opium if the bowels are irritable, constitute the best way of giving mercury in these cases; but if the digestion is very easily disturbed the drug should be given by inunction or by the calomel bath. When the iodide is given it may be conveniently combined with the ammonio-citrate of iron, and each dose should be given in three or four ounces of water. The bowels must be so regulated as to ensure a soft daily motion without irritation or purgation. For this purpose the admixture of salad oil with the food (or, for instance, with finely minced green vegetables, or with mashed potato, or as a sauce with fish &c.) will often answer well; or the oil may be taken separately the last thing at night; or a tumblerful of hot water may be taken at night. Aperients are best avoided, but if something more active than olive oil is needed, castor oil or the compound liquorice powder is probably the best. The diet should be nutritious and easily digestible, and all foods leaving an irritating residue (such as currants, figs, and brown bread) carefully excluded. Milk and oily foods are beneficial, and plenty of fluid should be taken. Locally, if the ulceration is severe, and especially in the gummatous form, it is useful to wash out the rectum with a warm solution of permanganate of potash after the action of the bowels, and then to introduce a suppository, which may be of iodoform or of grey oxide of mercury. Iodoform is best at the commencement of the treatment, and if the ulcers are foul or indolent; afterwards the grey oxide of mercury (a drachm to the ounce) is an excellent application. This last I learned from Sir Prescott Hewett. Occasionally, when the ulceration is very extensive and destructive, and especially when it has extended into the bladder, colotomy is necessary. Let me now call your attention to a case of hæmorrhage from the rectum of unusual origin.

CASE 4.—A woman aged thirty was admitted on account of severe hæmorrhage from the bowel. She was extremely anæmic and very weak; the heart was irritable and she suffered from palpitation and dyspepsia. With every action of the bowel she lost a considerable quantity of venous blood, and large masses of venous hæmorrhoids protruded, which were returned with difficulty. All the veins of the lower extremities were enlarged, and many were varicose, especially those of the left leg. Over the left leg there were numerous purpuric spots. Examination of the rectum revealed great dilatation of the whole hæmorrhoidal plexus, and near the anus were numerous large masses of dilated veins which bled freely when touched and which were protruded whenever a motion was passed. The history which the patient gave us was that a year previously she had had a difficult labour, at which instrumental assistance was necessary; that after this she was extremely ill and that the left lower limb became greatly swollen; since then the veins of both legs had become varicose, she had had daily hæmorrhage from the bowel, and she had become increasingly weak from loss of blood. Evidently this woman had had pelvic phlebitis after parturition, with blocking of the iliac veins and consequent obstruction to the middle and inferior hæmorrhoidal veins, upon which followed the venous dilatation and bleeding. An attempt had been made before I saw the patient to ligature some of the more prominent masses of veins; but the bowel was so congested and softened, and bled so freely on being touched, that this was abandoned. The treatment adopted was the long-continued maintenance of rest in the recumbent position with the pelvis well raised, the careful regulation of the bowels, and the application of astringents to the protruded mucous membrane. The long-continued rest gave time for the venous circulation to accommodate itself to fresh routes; for the regulation of the bowels daily small doses of sulphate of soda in hot water were given, which you will find a very useful aperient for producing soft motions and facilitating the portal circulation; the local application was a weak solution of acetate of lead freely applied over the protruded bowel before it was returned. This treatment was continued for nine months, after which she was allowed gradually to resume the upright posture and to walk about. The dilatation of the veins was then greatly diminished. There was no return of hæmorrhage or prolapse, and she went home quite free from discomfort and greatly improved in health.

This leads me to speak of some matters connected with the treatment of hæmorrhoids, three cases of which you have seen recently operated upon, each of which was admitted on account of hæmorrhage from the bowel. This complaint is so common, and you have so many opportunities of learning its treatment, that it may seem hardly worth while to occupy your time in speaking of it in a clinical lecture; but I do so with the object of drawing your attention specially to certain points connected with the subject which I think may be not without interest and use to you. First of all let me remind you that because a person suffers from hæmorrhoids it does not therefore follow that an operation is necessary. I say this because the cases admitted into the hospital are usually such as require operation; but you must remember that these are the severe cases, that they have mostly been subjected to treatment before being sent in for operation,

and that there are a great number of milder cases which are treated outside the hospital, examples of which you will meet with frequently in practice, and which require no operative interference. If, therefore, you judged of the frequency with which operation is necessary in the treatment of hæmorrhoids from the proportion of cases operated upon in hospital practice, you would form a very exaggerated idea of the necessity for operation. Consider for a moment what is meant when we say that a person is suffering from hæmorroids. Usually this—that the patient has more or less fulness and dilatation of the veins of the rectum; that this condition may have given rise to the formation of one or more venous tumours which may be protruded and bleed when the bowels act. Sometimes these dilated veins are around the anus and external to the sphincter (external hæmorrhoids), sometimes chiefly within the sphincter (internal hæmorrhoids), and sometimes both at the margin of and within the anus. The skin and mucous membrane over the external and marginal hæmorrhoids are apt to become very much thickened and hardened, and this condition you must take care to distinguish from the hypertrophy and induration of the folds of skin at the margin of the anus often seen as the result of syphilis and also of long-continued vaginal discharge—a condition to which the patient often erroneously gives the name of hæmorrhoids. Internal hæmorrhoids are apt to become pendulous and indurated in proportion to the length of time during which they have existed, and, morever, often present more or less ulceration upon their surface. There is besides, another variety of internal hæmorrhoids, less common than those already mentioned, which consists of a small sessile vascular growth, chiefly arterial, and which gives rise to very little pain, but very profuse hæmorrhage. Now it will be evident to you that the conditions I have described may be due to a variety of causes, and will require a corresponding variety of treatment, or perhaps no treatment at all; and certainly in many of them no operative interference will be necessary. For instance, a considerable proportion of those who are the subjects of hæmorrhoids are persons whose veins throughout the body are weak and varicose. They have varicose veins in the legs, perhaps also in the arms, and probably also in the spermatic cord. You will remember that the submucous tissue of the rectum is very loose, so as to allow of the varying condition of distension to which this part of the bowel is liable; the veins, therefore, have but little support; they have a long column of blood above them and no valves, and so easily become dilated. Now if such persons avoid constipation and portal congestion and take a reasonable amount of exercise the veins of the rectum, though always somewhat dilated, may give them no more trouble than the veins of their spermatic cord or of their extremities; but if they eat and drink largely, lead a sedentary life, and become constipated the distal veins generally (legs, spermatic cord, and rectum) will become troublesome, and there will be aching pains in the legs, in the testicles, and in the rectum; then, a little bleeding occurring from the bowel, the patient seeks your advice on account of his hæmorrhoids. Such a case requires not an operation, but a reasonable modification of the mode of life, and, if this is taken heed of, may never require anything else. Of course, if these weak-veined people neglect the action of their bowels and otherwise live imprudently, they may easily develop hæmorrhoids of a severity requiring operation; but what I wish to impress upon you is that in the earlier stages of the complaint, such as you will more often meet with in private practice, only such simple measures as I have indicated are required, and that the cases that come into the hospital are mostly the severe and neglected ones. All persons with lax veins should be made to appreciate the immense importance of position in regard to the venous circulation. Many such would avoid all trouble both with the veins of their legs and rectum if they would simply observe the precaution of resting, whenever possible, with the legs raised. This is especially desirable at the end of the day, when it is also usually most practicable; so that the recumbent position in the evening and an occasional dose of Epsom salts would keep many of these patients out of the hands of the surgeon. Another class of persons who are prone to suffer from hæmorrhoids are anæmic young women, who are habitually constipated and who lead inactive lives. Their circulation is feeble, and the presence of hard fæces in the rectum is a continual obstacle to the return of the venous blood, and so the veins of the anus become dilated. The mischief is often aggravated by the repetition of irritating purgatives and by irritating food taken with the idea of combating the constipation, and perhaps by the injudicious administration of alcohol. For such as these the treatment indicated is the careful regulation of diet, exercise, and the digestive apparatus. These girls often have defective teeth and are dyspeptic; the teeth should therefore be attended to, and the food be digestible and unirritating, and taken with a proper amount of fluid. Warm clothing and fresh air are of great importance, and if the patient is too weak for sufficient exercise massage may be used with advantage. Salad oil, hot water, the sulphates of magnesia and of soda, aided by nux vomica—these are appropriate aperients. Such measures as these, carried out carefully and perseveringly, will usually render operative interference needless.

A contrast to this class is met with in the patient who eats and drinks largely, takes but little exercise, and who comes to you with painful hæmorrhoids, a large congested liver, some gouty symptoms, and perhaps a little albumen in the urine. In such persons, especially if gouty, thrombosis is apt to occur in one or more hæmorrhoids, and often with this there is a good deal of inflammation round the blocked vein. These are not good patients for operations of any sort, and probably none will be needed for their hæmorrhoids if they will be persuaded (which they very often will not be) to moderate their diet, leave off alcohol, and take a course of Carlsbad or other saline aperient.

I need hardly remind you that the pregnant uterus and other abdominal tumours may give rise mechanically to temporary enlargement and distension of the hæmorrhoidal veins, which will entirely or to a great extent subside when the cause is removed. Of course, however, repeated pregnancies may lead to persistent hæmorrhoidal dilatation which may require to be removed by operation. Remember also that cirrhosis of the liver and mitral disease are conditions in which occasional bleeding from hæmorrhoids may be salutary. One other point let me remind you of in connexion with the presence of hæmorrhoids—namely, that they may be only part of a much more serious condition. Above the hæmorrhoids may be a malignant growth which, by its interference with the circulation, may give rise to dilatation of the veins below.

But although, as I have endeavoured to impress upon you, there are many cases of hæmorrhoids which need no operation for their cure, yet there will always remain a considerable number which can only be satisfactorily treated by operative measures. Let me conclude my lecture, then, by a few words on the operative treatment of hæmorrhoids. There are a great many different operations for removing them, but the two methods most commonly practised in this hospital are clamping and tying, and in my judgment these two are by far the best operations for ordinary cases. The small, sessile, arterial hæmorrhoid can be successfully and painlessly destroyed by the application of strong nitric acid, but this treatment is not adapted for the other and more common forms of hæmorrhoids. Of the two methods of which I have spoken—the clamp and the ligature—I prefer on the whole the clamp, as it is certainly the less painful; but practically I often combine the two, using the clamp for the removal of the chief masses, and tying any vessels or small surfaces which bleed after the clamp is taken off. If, however, a patient has been greatly weakened by loss of blood it is best to use the ligature only. The results of both methods seem to me to be equally good, but I think the amount of pain after the operation is less and the recovery more rapid when the clamp is used. I find in the hospital records of the last ten years 140 cases of operation for hæmorrhoids; in 85 of these the clamp was used and in 55 the ligature. Among the 140 cases there were three deaths. One of these was certainly in no way due to the operation. The patient, a woman aged thirty-five years, was brought to the hospital in a state of extreme exhaustion and anæmia, having been for six years losing blood from the bowel. A few hæmorrhoids were ligatured, but she died eight days after admission from simple exhaustion. Post mortem nothing was found excepting extreme anæmia. The second death was that of a woman aged eighty-one years, who died from erysipelas following the operation by ligature. No post-mortem examination was obtained. The third death occurred in a patient under my own care. A man aged thirty-four years had suffered for thirteen years from hæmorrhoids and was extremely anæmic. I removed several by the clamp and ligature, and a few days after the operation he developed broncho-pneumonia, from

which he died. The post-mortem examination gave evidence of the broncho-pneumonia and nothing else. There was no peritonitis, no suppuration, and no thrombosis, and the mucous membrane of the bowel was natural. Still, the lung affection followed quickly upon, and was probably in some way connected with, the operation. Considering, however, the number and severity of the cases operated upon it will be evident that the mortality of either of the methods referred to is very small. In conclusion, let me remind you that it is worth while to advise patients who have been operated upon for hæmorrhoids so to regulate their bowels, their diet, and their habits of life as to avoid conditions which favour the development of the disease.

THE NATURE OF CERTAIN CATARRHAL AFFECTIONS.[1]

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[DR. FOXWELL first pointed out that the word "catarrh" as used at present simply indicated a morbid histological process common to a great variety of diseases and that it possessed no useful clinical signification. He then referred to views held by him in 1885[2] to the effect that there was a number of acute febrile affections characterised by catarrhal inflammation which received various names according to the part of the body chiefly involved, but all of which so fundamentally resembled each other that they could but be varying manifestations of the same disease, this disease being of specific constitutional nature, for which he had suggested the name "catarrhal fever." Further reflection made it plain that pyrexia was no invariable concomitant of these affections, so that the substantive term "fever" was somewhat of a misnomer. This led to a discussion of the essential value of the adjective "febrile" in the phrase "specific febrile disorder" and to the conclusion that "absence or presence of pyrexia was no bar to the unity of disease." Dr. Foxwell then continued as follows:]

There thus opens out a very wide group of affections which I would wish to unite under one designation. For the sake of clearness I will ask you to allow me to use a new term for this purpose, and the one I have chosen is "catarrhus." Catarrhus, then, I look upon as a constitutional specific disorder having many varieties of local expression, but I am inclined to think it need not always produce constitutional symptoms, any more than does tubercle in the tuberculous affections of glands or in lupus. It would seem that the toxins of its germ and of the bacillus of tubercle are often incapable of wide diffusion, or else that they cannot induce symptoms unless in a concentrated form, so that for the disease to become constitutional the germs must either exist in several scattered foci or else have an unusually virulent nature. Some localised catarrhs, with frequent subacute recurrences, such as the pharyngeal and bronchial, may thus be cases of catarrhus, the small localised nests of germs undergoing repeated increases in their families whenever any depression in the tissue in which they are dwelling makes it a more suitable culture medium for them. Similarly there may be constant small outbursts of localised tuberculous mischief strictly limited to the apex of one lung. But many—perhaps most—localised catarrhs are due to quite other causes—some entirely independent of any germ and arising from chemical or mechanical irritation; some to the impaired nutrition of the affected membrane remaining after the ravages of a germ other than that of catarrhus—as measles, diphtheria, and whooping-cough; and some again resulting from the impaired nutrition caused by an acute attack of catarrhus itself, though none of its specific germs remain. Thus the track of a tornado may be traced by the devastated land long after the atmosphere has resumed its wonted serenity, just as the damaged mitral valve remains to tell how rheumatic fever once held sway, and the pock-scarred skin witnesses to the disease whose terrors Jenner long since took away. I would include under the specific disorder "catarrhus" the following affections: a variety of acute pneumonia, coryza, tonsillitis, quinsy, glossitis, sore-throat, laryngitis, croup, bronchitis, gastro-intestinal catarrh, meningitis, peritonitis, pleurisy, pericarditis, nephritis, hepatic congestion, vesical catarrh, and some skin affections, as herpes catarrhalis, some erythemas and urticarias.[3] I say a *variety* of these affections, for they can all occur in disorders other than the one under consideration, but then, clinically, their course is different. I never remember to have seen any one of these occurring alone in an attack of catarrhus; and the combinations and permutations of their concurrences in individual attacks are endless.

These combinations are a great argument in favour of etiological unity of the things combined. Who amongst us doubts that the cutaneous and alimentary disturbances of scarlet fever are etiologically identical? Yet the certainty that exists in this matter is due to their frequent combination in the disease and not because the specific poison has been found in these localities. It is true that often there is a special character in them when they occur in scarlet fever; but, equally so, there is a special character in the respiratory and alimentary disturbances of catarrhus. No one will gainsay that, taking a large number of consecutive cases, the tonsillitis of catarrhus is as characteristic as that of scarlet fever. With regard to frequency of combination, I think the involvement of the respiratory and alimentary systems is quite as frequent as that of the cutaneous and alimentary in scarlet fever. Moreover, this is not all: not only are these conditions frequently combined, but sometimes one and sometimes another element of this combination takes the chief position; and yet—and this is the important point—the general course of the disease is unchanged, though naturally modified in detail in accordance with the special lesion produced. Thus Dr. Ashby[4] describes the various varieties of pneumonia, his fourth being gastric pneumonia, which he thus defines: "In these cases gastric symptoms are most marked; the attack may begin with vomiting, diarrhœa, coated tongue, fever, and abdominal pain, and it is only after a day or two, when the classical signs of pneumonia appear, that a diagnosis of pneumonia is made." Surely this is no logical position; "gastro-intestinal catarrh with some pneumonia" would be a name much more in accordance with the facts. But as yet it has not been decided to acknowledge a so-called idiopathic form of gastro-intestinal catarrh, so when we come upon it we restlessly search till we find it in the company of some other affection whose right to the term "idiopathic" has already been admitted. Hence, though the pneumonia, even when it is discovered, occupies a very small portion of the disease-picture, yet it is eagerly seized upon as something that is known, and one insists upon calling the whole complaint by its name.

But to my mind the most convincing proof of the unity of all acute catarrhs is in the definiteness of the duration and course of the disease, no matter what part of the body be the chief local sufferer. Take, first, the duration. This varies from three to seven days, depending upon the severity of an attack; a mere coryza may last the seven days, while a pneumonia may end in three; and a peritonitis may be shorter lived than a pleurisy. But whatever the severity or local condition, all varieties of catarrhus have as much right to the designation "one week" as typhoid fever has to its historical "three weeks," and their existence is quite as determinate as that of scarlet fever or of influenza. The course is still more striking in its unity than its duration, and whatever the part affected—

[1] A paper read before the Midland Medical Society on Dec. 5th, 1894.

[2] Vide (1) The Nature of Acute Pneumonia in Children, Practitioner, July, 1886; (2) Acute Laryngitis in Children, Birmingham Medical Review, February, 1887; (3) Acute Primary Peritonitis, Ibid., July, 1887; and (4) for a full account of the whole subject, Essays in Heart and Lung Disease, published by Griffin and Co., May, 1895.

[3] It has been objected to this category of affections that it is so extensive that any disease which includes them all has denotation so largely writ that its connotation must be attenuated almost to a vanishing point. But first, it must be remembered, I do not include all these affections, but only a variety of them all. Bronchitis, e.g., is a name given to the genus of a local morbid process; this genus has many species, some of these species are complete affections, but many are only the various bronchial manifestations of an equal number of constitutional diseases. Secondly, other specific disorders include just as large a number, only the variety is different. To take scarlet fever, Dr. Crooke, in those extremely valuable papers of his on the morbid anatomy of this disease (Birmingham Medical Review, July, August, September, and November, 1886, and June and July, 1887), describes inflammatory affections of the tongue, tonsils, throat, larynx, lungs, intestines, liver, spleen, kidneys, and joints, as well as general acute adenitis; and to these Dr. Line adds (Ibid., March and May, 1887) coryza, otitis, cellulitis, peritonitis, stomatitis, herpes, and the rash: to these, again, I may add pleurisy, meningitis, and bronchitis—a list, it will be seen, quite as formidable as the one I have above detailed.

[4] Ashby and Wright: Diseases of Children.

whether it be a coryza, the outcrop of a few vesicles, as in herpetic fever, or a severe pneumonia—the onset is always sudden, and in a few hours the disorder is at its height; there it remains for a few days, with little variation; then, in as short a time as it took to arise, it vanishes, leaving traces, it is true, locally, but the constitutional symptoms go completely, leaving only the lassitude of convalescence. Now this rapid vanishment, this crisis, does not strike one so keenly in simple coryza as in pneumonia; but it is there, cut just as clear. Only, the constitutional attack is slight in coryza, and therefore its going does not strike one so vividly; moreover, the local repairs which have to be effected are on the surface and insistent, requiring a blowing of the nose for several days to come, and a cold is not considered to be gone till this local annoyance has gone also. In pneumonia the local repairs take still longer; they are seldom finished in a fortnight from the crisis, but they are neither felt nor seen, and they do not intrude themselves, so that it is convenient to forget their existence. Yet, let the coryza be a severe and prostrating one—an influenza cold, as it is sometimes termed (which, by-the-bye, is a bad term, for influenza is an entirely distinct disease)—then the crisis will be as marked as in pneumonia, for the constitutional symptoms were equally severe, and their equally sudden disappearance naturally produces an equal effect upon the senses, especially as in these cases the nasal discharge often goes with almost equal celerity. It will be said that coryza more frequently relapses. I do not think so, if it be treated with equal care. How often is there seen amongst the poor evidence of relapsing pneumonia against which the sufferer has vainly struggled, till at last he has been compelled to take to his bed. But pneumonia cases are usually put to bed at once, and if the same were done for coryza but little of relapses would be seen or heard of. These very relapses are an indication of the unity of catarrhus, for a relapsed coryza is not seldom a bronchial catarrh or a pneumonia itself. Is it not a well-known laic saying that "his death was due to a neglected cold"? But a relapse or exacerbation does not change the specific nature of a disease. Hence in such cases, at least, the added pneumonia and bronchial catarrh can be but fresh symptoms of the original affection.

[It was then argued that in geographical distribution and meteorological conditions bronchial catarrh and pneumonia were practically identical. Further, Hirsch has shown that true croup resulting "from harmful meteorological conditions" generally becomes epidemic under the same influences which set up an unusual prevalence of bronchial catarrh. Alimentary, like respiratory, catarrh is also world-wide, and, as one would expect, the exciting cause is oftener evil food than chill, as is strikingly shown in the recorded outbursts of epidemic catarrhal jaundice. In fact, all these acute catarrhs occur under very similar climatic and meteorological circumstances, and from these points of view, therefore, are probably single in origin. Dr. Foxwell went on to say:]

All these acute catarrhs are probably mutually contagious. Pneumonia and coryza are generally recognised as being capable of reproducing themselves in fresh subjects, and it is also admitted by most of us that, given three men who are equally exposed to, say, chill, the chances are much against all three getting any one form of catarrh; but, whilst one has pneumonia, another will get a head cold, and the third gastric catarrh. Further, it is agreed that, though no doubt a cold may run through a house—that is, is infectious—yet this cold takes very different forms in the different individuals of the household: one has nasal catarrh, another chiefly shivering and general pains, a third a cold on the chest, and a fourth an upset stomach. In this instance, at any rate, all these varieties of catarrh must be etiologically identical, and it is equally evident that this single cause cannot be "chill." On this point Dr. R. Percy Smith wrote to me as follows in 1886: "With regard to the contagion of ordinary catarrh, do you know the interesting fact that at St. Kilda, which is very much isolated from the rest of the world, they have an epidemic of what is called 'stranger's cold' whenever a ship visits the place, and never at any other time, although they are exposed to bad weather and storms?" In the same letter Dr. Smith states that at some schools which he at one time supervised there was an outbreak of various diseases, including facial erysipelas, acute pneumonia, and "thirty to forty cases of herpetic fever," the exciting cause of all these being, he thinks, defective drainage, and he goes on to make this suggestive comment: "I suppose all one can say is that the 'germs' of these different diseases happened to be knocking about, searching for a proper nidus for development," intending me to conclude, no doubt, that the defective drainage was a depressing cause which afforded this "proper nidus." At Pendlebury, if a nurse in the scarlet fever ward developed a sore-throat, though no other symptom of the fever, we did not hesitate to put it down to the scarlatinal poison; but if a nurse whilst nursing pneumonia patients develops a cold or sore-throat, as she not seldom does—indeed with a frequency, I think, unaccounted for by the logic of chances apart from infection—one does not dream of calling it a pneumonia cold or pneumonia throat. Further, families are often attacked by scarlet fever where some individuals have had nothing but slight sore-throats which would have passed unnoticed at any other time, but which the dread sequela of nephritis has enabled the hitherto hesitating practitioner to diagnose as "scarlatinal throat." Similarly, I have had personal experience of two or three instances—and believe it to be by no means rare—for catarrh to exist in various forms in a household, and for one member to suffer from acute pneumonia; yet it never suggests itself to say that the acute pneumonia, if coming first, produced the other catarrhs, or, if coming later, was caused by one of them. But I feel convinced that if once the contagiousness of catarrh were authoritatively recognised there would speedily be multitudes of examples of such contagion afforded. Another argument in favour of the infectious nature of catarrhus is the frequency with which all other causes fail. The action of chill is greatly overrated. Of pneumonia Dr. Ashby states that in Manchester it is almost equally prevalent at all periods of the year; whilst Dr. Fagge asserts that most writers who have tabulated their cases from this point of view fail to trace chill as a cause in any but a small proportion (59 in 603). And, in speaking of colds, is it not an everyday saying, "I cannot make out how I caught it"? And so long as there is a determination to look only to chill as the cause of coryza, it is likely that this phrase will maintain its reputation.

Of the infectious nature of catarrh of the serous membranes it is harder to speak; it is very rare for catarrh to occur in them alone, and when it does, even if infectious, it would have little chance to spread if limited in its action to a closed sac. But there is the serous catarrh styled "cerebro-spinal meningitis," and Drs. Sturges and Coupland suggestively point out the close relationship of this to acute pneumonia. Both conditions are infectious, but are they one and the same? Infection from any disease of the alimentary canal does not often occur except through the stool, and there is good reason to believe that the summer diarrhœa of children is sometimes caused by such direct infection. Hence, though there is by no means direct clinical proof, yet there is much to suggest that all these varieties of catarrh are mutually infectious.

Infection one can scarcely think of nowadays apart from a germ. If, then, all these various affections are to be included under one disease the same germ must occur in them all. The pneumonococcus has been found in all respiratory catarrhs, in meningitis, in pericarditis and pleurisy, in peritonitis, and in nephritis; and cultivations of it have induced a condition resembling acute pneumonia when injected into an animal. I can find no record of its having been searched for in the alimentary tract, but it cannot be doubted that there it would be found as well. Indeed, Flügge, in his work on Micro-organisms, states that injection of cultivations of the "bacillus of pneumonia" into the veins sets up marked gastro-enteritis. It does this, it is true, in company with other germs, but I am not now arguing that the pneumonococcus is the sole cause of gastro-intestinal catarrh, but that one form of this affection is produced by its agency. Its etiological value in peritonitis is much disputed, but Mr. Treves in his Lettsomian Lectures for 1894 on Peritonitis makes it the cause of one of his five subclasses of this disease. He quotes Fraenkel as showing that in 1 out of 20 cases of peritonitis wherein he sought it the pneumonococcus was the only germ found. Also he states that Tavel and Lanz, Weichselbaum, Courtois, Suffit, Scavestre, Nélaton, Gaillard, and Monisse have reported cases of peritonitis where the pneumonococcus seems without doubt to have been the cause. In some of these the peritonitis was primary and the sole affection; in others it was secondary (*sic*) to ordinary pneumonia. On the other hand, he states that Netter found the pneumonococcus in the peritoneum in 151 cases of fatal pneumonia,

but that in only two of these was there peritonitis. I do not consider these results of Netter's investigations to be much of an argument against the causative power of the pneumonococcus. If catarrhus be a constitutional disease, then either the germ or its toxines are scattered throughout the body and able to set up mischief in all parts. The peritoneum is but little affected by its influence, else peritonitis would be as common as pneumonia. Moreover, the germ of catarrhus must be even more omnipresent than that of tubercle; yet one is no more always being attacked with the disease than one is constantly the subject of tubercle. The bacilli of tubercle have been found in the expectoration of non-tuberculous subjects; similarly the pneumonococcus may be found where no evidence of its evil power is discoverable. Again, Mr. Treves remarks that irritants—e.g., tincture of iodine and liquor ferri perchloridi—produce peritonitis by so affecting the bowel that this allows bacteria to pass through its coats, which, when healthy, it will not do. It may be that the depressing irritation of chill or evil food may similarly allow the passage of the pneumonococcus.

There are several kinds of pneumonia bacilli; they are probably but varieties of the same species, for they are well-nigh identical morphologically as well as in producing pneumonia experimentally; they agree, also, in most of their cultivations, the chief difference being in their growth in gelatine. Of these varieties, those of Friedländer and Fraenkel are the most important. My remarks refer solely to Friedländer's, as I have discovered very few facts concerning the other.

The unity of these catarrhal affections and their specific constitutional nature by no means stand or fall with the capacity of the pneumonococcus to produce them. The germ possessing this power may well be yet to find; and if, on other grounds, there be strong evidence of the existence of such a specific disease as catarrhus this germal lacuna should only be an incentive to fresh germal research. But, whatever germ be the cause of catarrhus, it must be, like the bacillus of tubercle, very largely dependent upon the suitability of the soil attacked. This suitability, as with tubercle, depends upon two things—viz., inherited predisposition and an exciting cause, this latter being usually of the nature of a sudden depressant.

There are numerous individuals, otherwise robust, who are peculiarly liable to this disease—they "catch cold" on the least occasion. It is true that these colds are usually nasal; but that is merely because frequent bronchial, pulmonary, and intestinal attacks are not consistent with robust health, the individuals suffering from them soon descending into the class of feeble lives and thereupon not suffering so frequently, since they guard themselves more carefully against the exciting cause. But, though the inheritance of catarrhal susceptibility is undoubted, yet the germ of catarrh is pre-eminently, perhaps more so than any other, dependent upon the aid of exciting causes. By far the commonest of these exciting causes is sudden lowering of temperature; so powerful, indeed, is this cause, and so comprehensible in its theory of producing the resulting inflammation, that it is hard to believe that it is not of itself all-sufficient. Years ago I firmly held this creed, and I have given it up with great reluctance. More and more, as time goes on, it is established that in the production of acute disorders three causes are usually brought to bear—viz., predisposition, exciting, and a germ. The exciting cause is the striker of the germal match to the laid fire of predisposition; and, indeed, as with the fire so with the individual, the striking cause is the one which is chiefly amenable to control. Still, though the germ of catarrhus is thus usually so extremely dependent upon external conditions to work evil, this is not always so. And herein lies one of the principal arguments in favour of its existence. Sometimes it does not lie like a dead match with potential vitality only, waiting for the exciting hand to make it kinetic, but unaided it possesses the power to light up disease—to wit, when catarrhal affections become contagious—for a cold not seldom runs through a house, and pneumonia itself occasionally becomes epidemic. It is the existence of these attacks, arising apart from evidence of predisposition or exciting cause, which forms a chief bond of union between catarrhus and other acute specific disorders. Moreover, the indubitably proved greatest frequency of catarrhus at periods of the year and in climates where sudden depressions of temperature and excessive moisture are chiefly concomitant points to these conditions as being peculiarly favourable to the vitality of its germs, and to the supposition that the frequency of the disease at these times is in great measure due to unusual germal activity. The occurrence of enterica at special periods is similarly explained.

Catarrhus, then, I would define as an acute specific disorder of a week's duration. The incubation is short, seldom more than forty-eight hours and more often only twenty-four, and during it no special symptoms are discernible. The onset is sudden, the height of the disease being reached in twelve to thirty-six hours; it is usually accompanied by chilliness or a distinct rigor, and vomiting is frequent. There are also headache and muscular pains. The disease continues at its height for from three to six days, and, whatever form its local expression may take, the constitutional symptoms are very constant in duration and cease by crisis. If these should be prolonged there is usually evidence of fresh local injury, and the prolongation is of the nature of a recrudescence or relapse. Pathologically it is essentially an exudation—serous, fibrinous, cellular, or membranous—from one or more of the lining membranes of the body. In severe cases some glandular organs become so seriously affected that acute interstitial inflammation, or even their suppuration, results. Some portion of the respiratory and alimentary tracts are always affected, the naso-pharynx being the commonest of all regions to be attacked. The tonsils and tongue rarely escape, "quinsy" and "glossitis" being the terms used when these regions are most severely involved. Next in frequency to suffer are the bronchi, and after them the pleuræ, the alveoli of the lungs, and the stomach. Not seldom the intestines are injured as well as the stomach, sometimes so severely as to cause ulceration, when the term "enteritis" is adopted. The pericardium and the meninges of the brain are occasionally the chief foci of the disease, that covering the convexity of the cerebrum—and, curiously, often only one half of it—being the portion of the meninges which usually suffers. The skin lesion is common and consists in a herpetic eruption, usually on the face, especially near the naso-labial junction, but occasionally on other parts of the body. Sometimes this forms the only striking lesion, and the condition is then styled "herpetic fever." A transient erythema, limited to the chest and face, is by no means rare at the onset. The question of the nature of the involvement of the kidney tubules is a very complicated one; that they not seldom suffer is generally admitted, but whether they are often the chief focus of the disease—that is, whether the condition called "catarrhal nephritis" is only one expression of catarrhus—is not so certain, though I believe it to be the case. Peritonitis is without doubt sometimes but one of the local lesions of this disease, as is also a form of acute inflammation of the urinary bladder. The crisis which puts an end to the constitutional symptoms occurs before any attempt at local repair has been attempted. It is evident that, as the parts to be repaired vary so much in character in different attacks, the time occupied by repair will also greatly vary—that is, the duration of convalescence is uncertain. Moreover, it is equally evident that the signs and symptoms arising from the injury done to the parts of the body which have borne the brunt of the attack will vary with the locality, and when the organs affected are important ones may so overshadow the general morbid state that the constitutional nature of the affection may fail to be diagnosed. Pyrexia is usually present, and when present is characteristic. At the onset the temperature rises suddenly to 103° or 104° F. in about twelve hours; with irregular remissions it continues at much the same level till it suddenly drops below normal, when the constitutional symptoms of illness as suddenly cease; thereafter there is usually a day or two of subnormal temperature, followed by a few more days of slight hectic ("post-crisial hectic") whilst the brunt of repair to the damaged organ or organs is being accomplished. The remarkable constancy of this pyrexia, whether it be only the tonsils or a whole lung which are involved, points very strongly to the specific nature of the complaint.

Catarrhus is contagious, though this quality is never strongly marked; the incidence of its attacks nearly always depends upon inheritance and opportunity, as does that of tubercle; but, whereas inheritance plays the more important part with tubercle, with catarrhus opportunity is by far the most powerful. This opportunity is always of the nature of a sudden depressant, and is oftenest the sudden influence of cold acting in a damp atmosphere. The essential cause is a micro-organism, in all probability the pneumonococcus of Friedländer, but its exact nature is not yet determined. It, like the bacillus of tubercle, is world-wide in distribution

and practically omnipresent where humanity is gathered together, but it only occasionally acquires sufficient virulence to successfully attack an individual in a condition of health. It is not self-protective, in this particular being allied to tubercle and malaria, one attack increasing the predisposition of the sufferer to fall a victim to another. Like other acute specific affections, restoration to apparently perfect health is the rule from a first acute attack, but, as with them, so with catarrhus, the local damage may not be thoroughly repaired, and a debilitated pharynx may be left, just as the ileum in enterica may remain permanently disabled.

It will be perceived that I have for the most part confined myself to generalised statements, and have not attempted to clinch my argument by reference to illustrative cases or analysis of accumulated facts. Time is my apologist, not lack of cases or facts.

Birmingham.

TURBINAL VARIX.

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TURBINAL VARIX may be defined as a particular form of hypertrophy which involves the posterior half of the inferior turbinal body, and is characterised by a permanent distension of the venous sinuses.

Morbid anatomy and pathology.—Nasal obstruction with catarrh is usually referred to under the comprehensive term "hypertrophic rhinitis," which embraces nearly all forms of thickening of the mucous membrane. But as there are many varieties of hypertrophic rhinitis, varying in degree from simple swellings to localised accentuations constituting polypi, it will be expedient to classify them according to the predominating morbid changes and in their order of frequency under four chief forms—viz.: (1) vascular, (2) mucoid, (3) lymphoid, and (4) glandular. In the simple and temporary cases each or all of these changes may be found; it is, therefore, somewhat difficult, even microscopically, to decide which variety is represented; but when the disease assumes a chronic or permanent character certain features will predominate and readily determine its nature. It is to a special form of the vascular group that attention is now directed, which, although occurring occasionally in the middle turbinal and even in the septum, will be found to constitute a disease almost peculiar to the inferior turbinal itself. A glance at a normal inferior turbinal will at once throw some light upon this peculiarity. The anterior two-thirds or half appears perfectly smooth, but the posterior portion and lower border present a striking and sharply defined contrast, being rough, swollen, and wrinkled even after soaking in spirit. Serial sectioning equally accentuates the contrast, for whilst the smooth region is characterised for the most part by the presence of glandular and lymphoid structure, the wrinkled part is mainly occupied by cavernous vascular spaces lined by epithelioid plates. These vascular channels—the "Schwellkörper" of Zukerkandl—are surrounded by several layers of visceral muscle fibres, arranged for the most part in circular and longitudinal directions, whilst some form a series of interlacing bands continuous with obliquely disposed bundles which traverse the intervening connective tissue. Many writers seem to have entirely ignored these muscle fibres; even so high an authority as Greville Macdonald describes the venous sinuses as "consisting of a thin layer of connective tissue apparently not elastic and lined with endothelium."[1] He further states that he failed to find muscular fibres in the trabeculæ. This oversight is probably explained by the fact that specimens were examined whose walls were already the seat of morbid changes. These cavernous spaces are apparently supplied by thin venous radicles which, commencing in the hyaloid basement membrane, run a comparatively straight course inwards through the lymphoid and connective tissue to open obliquely in the sinus. In some sections the sinuses are distended with blood, whilst in others they are quite empty and tortuous, a condition which has been described as collapse. This variation doubtless depends upon their condition when removed and the methods of removal. Although their general arrangement does not conform entirely to that of the corpora cavernosa and corpus spongiosum, the slight histological difference does not justify the view that their nature is not erectile, and that they are never erectile in health or disease (as maintained by Bosworth[2]); still less so in the light of the remarkable sympathy which these bodies exhibit with sexual and developmental phenomena. Attention is specially directed to these muscular fibres, because in their morbid conditions is to be found an interpretation of the pathology of one form of turbinal disease. Owing to the courtesy of my colleague, Mr. Carmalt Jones, an abundant supply of material has afforded me an opportunity of tracing the varying degrees of degeneration which this erectile tissue undergoes, and the conditions were so constant in their appearance as to justify the view of a more than merely coincidental connexion. The peculiar villous or brain-like macroscopic appearance of the surface was seen microscopically to correspond with a cystic invagination of the surface epithelium, covering distended loops of vessels with very thin walls, embedded in mucoid tissue—that is, connective tissue in which the matrix mucin was in excess of the fibrous reticulum and cells. The muscular walls of the vascular sinuses presented well-marked atrophy and degeneration, varying from simple thinning to complete disappearance, owing to the fibres apparently sharing in the surrounding mucoid changes. (Figs. 2 and 3.) In places the intervening mucoid tissue simply formed their boundaries, whilst in other parts the walls seemed to have undergone fibrotic changes. This condition is therefore not a mere hypertrophy of the structures, but consists of a true degeneration and infiltration of the walls of these vascular spaces, a morbid process

FIG. 1.

Portions of inferior turbinals exhibiting different degrees of varix (natural size).

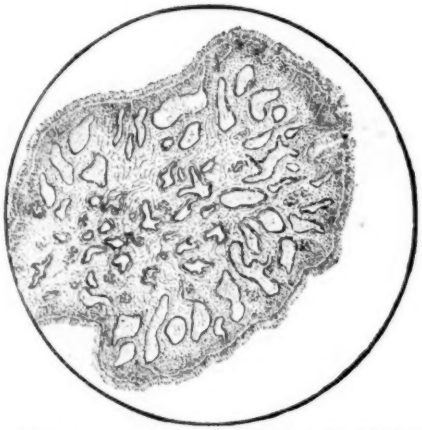
[1] Diseases of the Nose, pp. 14–16.

[2] Treatise on Diseases of the Nose and Throat, vol. i.

which is responsible for the disease, for the walls gradually losing their power of *active* recoil, the vessels by degrees become more and more distended and a permanent enlargement ensues which is in fact a varix.

Etiology.—The conditions which favour the development of this disease are so gradual and progressive in their influence that it is somewhat difficult to discriminate between the direct or immediate and the indirect or remote causes. Whilst admitting that a persistent exaggeration of the functions of the turbinal bodies may constitute a predisposing factor, it is difficult to believe—particularly in the light of the histological changes—that simple hypernutrition could be followed by any change other than hypertrophy of the vessel walls. But, given a tendency to mucoid degeneration or diathesis, due probably to some tropho-neurotic influences (local or general), excessive erectile activity of the parts must play an important *rôle*. In some instances the presence of an excess of small-cell tissue is strongly suggestive of an inflammatory process preceding the mucoid changes, and from the frequency of this disease among the London East-end aliens it is highly probable that various unhygienic conditions of living—such as prolonged exposure to very dry or very moist atmospheres more or less charged with impurities, particulate and gaseous—must exercise marked predisposing influences by keeping up constant irritation. That there is a hereditary tendency to hypertrophy of the mucous membranes of the nostrils there can be but little doubt, and this is often associated with a highly emotional temperament.

FIG. 2.



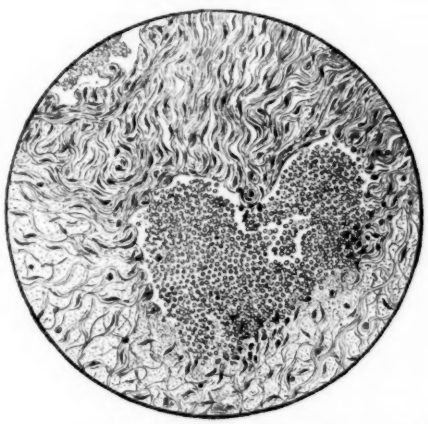
Section of the posterior end of an inferior turbinal with dilated vascular spaces (low power).

With regard to sex, males appear to be more frequently affected than females in the proportion of about five to three. Although considerable enlargement of the turbinals may be seen in early youth, turbinal varix is extremely rare before puberty, but after this period it may appear at any age. All conditions in which the venous flow is interfered with, such as intemperance with its attendant hepatic troubles, gout, pulmonary and cardiac diseases, with sedentary habits, will naturally be predisposing factors, for in most of the well-marked cases varix was present either in the tongue, legs, arms, or spermatic cords. The presence of enlarged faucial and pharyngeal tonsils will doubtless predispose by favouring nasal catarrh and by mechanically interfering with the venous flow; but the coincidence of adenoids is by no means frequent, which is not surprising considering the age. Excessive use of the nasal douche must not be overlooked; but perhaps by far the most likely exciting or direct cause will be found in the different forms of nasal stenosis, such as morbid states of the septum, collapse of the alæ, and general thickenings of the nasal mucous membrane, which not only favour catarrh and the accumulation of its products, but by obstructing nasal breathing cause exhaustion or rarefaction of the air posteriorly and consequent expansion of the venous sinuses, whose muscular walls may be already undergoing mucoid changes. Thus, nasal obstruction, combined with a predisposition to varix and mucoid degeneration, may be considered as mainly responsible for this disease.

Symptoms.—Collectively, the symptoms are those of nasal stenosis, such as mouth breathing and its inevitable sequelæ, parosmia, anosmia, and middle-ear troubles, especially distressing tinnitus. But there are several which, from their constancy and persistence, possess a special significance—viz., a shiny, sanguinolent discharge, generally expectorated in large quantities on waking and not euphemistically described by patients as "blood and corruption," occasional attacks of severe epistaxis, and either painful tenesmus of the faucial and pharyngeal muscles or paresis of the palate. These constitute a group of phenomena interesting in their striking resemblance to those of hæmorrhoids elsewhere and are in themselves almost pathognomonic of the disease.

Diagnosis.—Owing to the swollen state of the nasal mucous membrane a view of the hinder half of the inferior turbinal by anterior rhinoscopy is generally difficult, whilst a satisfactory posterior rhinoscopic image is prevented by the frequent faucial tenesmus; but a thorough cleansing, followed by the application of cocaine, will greatly facilitate an inspection in either direction. If seen from the front a dull red or purple mass may be found at a varying depth, on one or both sides, which does not shrink much under cocaine, but readily yields to the probe and does not change its position on forcible respiration, features which will enable an experienced observer to exclude ordinary catarrhal tumefaction and simple polypus. Still, it not infrequently

FIG. 3.



Section of the posterior end of an inferior turbinal exhibiting degeneration of the muscular fibres of a vascular space (one-sixth of an inch).

happens that the actual conditions can only be appreciated by a successful posterior rhinoscopy, which will reveal a red or purple brain-like mass projecting into the post-nasal space on one or both sides. In all instances, however, digital examination will at once afford by far the most reliable and available evidence. A soft, resilient, yet sharply circumscribed symmetrical mass will be felt on each side of the nasal septum, free all round except at its attachment to the inferior turbinal bone. This evidence, together with the existence of varix elsewhere, faucial tenesmus or paresis, blood-stained discharge, and the general history, will sufficiently indicate the nature of the lesion and enable a satisfactory diagnosis to be made from other forms of hypertrophic rhinitis, from polypi, and from other neoplasms, innocent and malignant.

Prognosis.—Should the foregoing description and interpretation of the morbid anatomy be correct, it is obvious that the possibility of a spontaneous cure is most remote, for the tendency will be towards a gradual but certain increase in the size of the varix. The clinical history of these cases amply confirms this view, for although the severity of the symptoms may vary, or even sometimes apparently remain stationary under palliative treatment, the almost inevitable result is that radical measures are demanded sooner or later. But it is quite possible that milder forms may, by judicious treatment, be arrested in the early stage. Should treatment,

however, be delayed for several years, the enlargement assumes such proportions that, on surgical attention becoming urgent by reason of the profuse bleeding and the stenosis, a diagnosis of angiomyxoma, papilloma, or some other form of nasal growth is often made.[3] General thrombosis of the mass is a somewhat rare termination.

Treatment.—The treatment will be palliative and radical. Palliative remedies, such as alkaline and astringent douches with general depletion, can only afford temporary relief, and must only be considered as preliminaries to a more thorough and permanent treatment. The radical measures will be directed first towards the removal of obstructions in the anterior regions of the nostrils, and afterwards to the treatment of the varix itself. Should any mucous polypi be present they must be removed, and any localised hypertrophy of the anterior end of the turbinal bodies or septum should be reduced by the galvano-cautery, chromic acid, or snare. Activity of collapsed alæ may be restored by massage and wearing short pieces of rubber tubing or nasal rings. The portal system should be depleted by a mild course of mercury and chalk or saline aperients. Direct treatment will be determined by the size and duration of the varix and its response to the action of cocaine, for should it be small and of probably only a few years' duration it may more readily contract. This degree of hypertrophy will most likely yield to the galvano-cautery, which should be applied either by plunging a fine point well into the substance of the cavernous tissue or by deeply scoring it with the fine edge of a flat point. Fused chromic acid if applied *secundum artem* is often very satisfactory. A slough generally separates about the fifth day, and cicatricial fibrosis with strangulation of the enlarged vascular spaces soon follows. Both nostrils should on no account be cauterised at the same sitting. When the swelling, however, is very large, and does not shrink under cocaine, caustics are absolutely useless, and complete removal is necessary. This may be affected either by means of a snare or a cutting instrument. Of the former the cold snare or *écraseur* is preferable to the galvanic, for it will, if necessary, cut through a portion of the bone, and if gradually tightened will not be followed by hæmorrhage, nor will it cause any subsequent sloughing, as is often the case with the galvanic loop. If only soft tissues are to be removed Krause's snare succeeds admirably, but either Jarvis's or Wilkin's is preferable when it is decided to include the bone. As a rule, there is no difficulty in engaging the swelling if the wire is directed by a finger in the post-nasal space. But by far the most satisfactory results, as far as complete enucleation is concerned, are to be obtained by the ring- or draw-knife, as introduced by Spencer Watson in 1888, and greatly improved by Carmalt Jones. (Fig. 4.) It has the great advantages of being effective,

FIG. 4.

Carmalt Jones's improved ring-knife.

rapid, safe, and painless, only ordinary dexterity being demanded by the operator. The operation is conducted as follows. The patient is seated on a chair in the usual position for nasal inspection, the head being steadied by an assistant. After freely cleansing the nostrils with an antiseptic douche and applying cocaine (a mouth prop being introduced at discretion) the knife is introduced into the nostril with its cutting side directed towards the diseased turbinal; the guarded index-finger of the disengaged hand is passed by the mouth into the post-nasal space and directs the ring into its proper position around the varix. The shaft is then directed slightly towards the opposite side of the face and sharply but firmly withdrawn in that direction, cutting its way through the turbinal body, which either escapes at the same moment or is subsequently removed by forceps should it not be dislodged by the patient blowing down the nostrils. By keeping the axis of the instrument across the median line and by varying the angle it is possible to remove only the particular part which is diseased, so that the anterior and healthy portion is left intact and the possibility of laying open the maxillary sinus is reduced to a minimum. The opposite side is then treated in the same way. Bleeding is generally profuse for a few minutes, but is easily controlled by dry tannin and lint plugs. These should be followed by plugs of boric lint, firmly packed and left in for twelve or twenty-four hours, absolute rest in the semi-recumbent position being insisted upon. The plugs are removed at discretion on the second day, when the nostrils should be gently cleansed with Dobell's solution. Owing to the rapidity and almost painlessness of the operation the major anæsthetics are neither necessary nor are they expedient, cocaine proving quite sufficient; still, in the case of very nervous patients nitrous oxide gas may be exhibited with advantage, for the operation is easily completed during its influence. The use of the ring-knife has one advantage in particular over the snare in that it removes all the diseased tissue at once, for it often happens that the varix extends for some distance along the inferior border of the turbinal and is very difficult to include in the snare. Two important complications are to be guarded against—viz., septic changes and secondary hæmorrhage. The first of these need not be feared if ordinary antiseptic precautions are taken, especially with regard to local cleansing before and after the operation, for, beyond a slight elevation of temperature, in upwards of 200 cases of turbinotomy at the Central London Throat and Ear Hospital there is no record of any trouble of this kind, which is somewhat remarkable, considering the dirty domestic surroundings of many of the out-patients. With regard to secondary hæmorrhage, this may occur as late as fourteen days after operating, and, as it is generally occasioned by the patient's disregard of the instructions as to absolute rest and removal of the dressings, whenever practicable he should remain in bed for three or four days, and under observation for at least a fortnight. Although sometimes the bleeding is alarming, ordinary measures are quite sufficient to stop the flow.

Results.—The swollen anterior end of the inferior turbinal soon shrinks, and free breathing is quickly established, with a corresponding amelioration of the symptoms. But are the results always so satisfactory? Certain undesirable sequelæ have been advanced as likely to follow turbinotomy—viz., (1) increase in size of the nasal cavities, anosmia, general atrophy of the mucous membranes of the nose, naso-pharynx, and larynx, with the usual troubles attendant upon imperfect filtration of the atmosphere; (2) opening up of the maxillary sinus and subsequent suppuration; and (3) falling-in of the nostrils and deformity. Having personally investigated the subsequent history of over 200 cases, some of which were operated upon as far back as three years, none of these evils were found to have occurred. That atrophy of the mucous membranes may follow it would be unreasonable to deny, but it is only fair to assume that it occurred in patients who were subject to atrophic rhinitis, which was not recognised in its early stage and for which milder measures would have sufficed. Permanent deformity due to collapse of the nostrils I firmly believe to be a phantom, for it not infrequently happens that, instead of an unnaturally roomy nostril, a distinct reproduction of the mucous membrane follows in the form of a ridge extending backwards from the anterior vestige of the turbinal crest which remained, presenting the appearance of a normal inferior turbinal. This was so remarkably shown in a case treated by Mr. Carmalt Jones that he removed a portion of the new turbinal two years after turbinotomy for microscopic examination. I found that it consisted of normal mucous membrane complete in its details. In two instances this turbinal spur was sufficiently prominent to require reduction by cautery. It is quite possible that the hiatus maxillaris may be enlarged, but that does not necessarily entail any serious results; at all events, I am not aware of its having occurred in the practice of the hospital to which I am attached. It is easily avoided by confining the portion removed to the region which is diseased, a restriction which is not always observed. In conclusion, it is not surprising that there should be some diversity of opinion regarding the pathology of a structure whose normal histology is the subject of so much dispute. It was, therefore, with the hope of obtaining some further evidence that I

[3] Sandford: Transactions of the British Laryngological and Rhinological Association, vol. iii., p. 13. Lus.: Archives de Laryngologie, December, 1890. Spencer Watson: Journal of Laryngology, July, 1893.

availed myself of the plentiful supply of material at my disposal. This investigation has, I venture to advance, established not only that visceral muscle fibres do exist in the walls of the venous sinuses, but that their morbid changes are responsible for the form of vascular hypertrophy which I have ventured to call "turbinal varix."

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CASES OF LIVER AND GALL-DUCT SURGERY.[1]

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IN this paper I propose to relate in detail the histories of all the cases of disease of the liver or of the gall-ducts on which I have operated. The cases consist of three in which exploratory incisions were made, two operated on for hydatids, and three in which gall-stones were extracted. The three patients on whom I performed exploratory operations died from the progress of diseases which it was impossible to cure by surgical means, but the operations did not, directly or indirectly, bring about or even hasten the fatal results. The other patients are alive now.

CASE 1. *Exploration; nature of disease not discovered.*—The first of the exploratory operations was performed on a woman forty-five years of age, whose family history gave no assistance in diagnosis. She said that a soft tumour had been taken out of her lower jaw eighteen years before I saw her, but I have not been able to get any account of this operation. She had suffered from bilious attacks for ten years at almost every menstrual period; the severity of these attacks had, however, been much less for two or three years. A swelling in the abdomen was first noticed in February, 1891, and it had grown considerably before she was admitted to the Samaritan Free Hospital in the following May. At that time there was a slight yellow discolouration of the skin and conjunctivæ. In the right loin there was a solid, smooth tumour, with a rounded outline, fairly movable and not tender, extending from the costal margin to close to the pubes and beyond the edge of the rectus muscle on the left side. It stood out prominently from the rest of the abdominal surface in front. The growth was believed to be connected with the liver, but no definite diagnosis was made. As it was growing rapidly an exploratory operation was performed on June 16th. The tumour was found to consist of a rounded swelling of the upper part of the liver, the gland being so displaced and twisted that the abnormal enlargement presented anteriorly. There was no hardness and no irregularity of outline in the growth, and, except for the alteration of shape, the surface of the organ appeared to be quite healthy. By passing the finger below the liver I found that the anterior border of the gland was of normal shape, but was directed downwards and slightly backwards, so that it had not been palpable before the abdomen was opened. It seemed as if the whole liver had been displaced downwards and twisted on its axis by something growing in or behind the upper and posterior part of it. I plunged a trocar and cannula deeply into the thickest part of the gland. The instrument appeared to pass through soft tissues of uniform consistence, and when the trocar was withdrawn nothing but blood escaped. The hæmorrhage was very free, spouting a foot and a half to two feet into the air, and continuing after the cannula was withdrawn, so that I feared it might go on to a dangerous extent. It did not seem as if anything more could be done in the way of curing the patient, and I therefore applied sponge-pressure to the puncture opening and inserted the sutures in the external wound. By the time these were in place the hæmorrhage had almost ceased, and I closed the wound without any anxiety on this point. There was no trouble during convalescence. The patient went home on July 6th, the swelling continued to enlarge, and she died on Oct. 8th of the same year. There was no post-mortem examination and I did not see the patient after she went home, but, as far as I can gather, death was due to asthenia, and no definite diagnosis was made. The operation in this case was most unsatisfactory in that no benefit resulted, and I did not even find out the exact nature of the disease. The fact that there was no post-mortem examination leaves the case permanently an obscure one, but I think some light may be thrown on the matter by the following history. On Nov. 30th, 1894, I saw a woman thirty-eight years of age in consultation with Dr. Malcolm Mackintosh, of Clapham-common. She was suffering from abdominal distension and pain, sickness, and frequent profuse evacuations of the bowels, the stools consisting almost entirely of watery mucus. There was some slight fever, but no jaundice and no renal or heart disease. The patient had borne three children, the third being eleven months old. The symptoms, which had developed very rapidly, suggested the possibility of some pelvic mischief causing irritation of the rectum, but after a careful examination I could find no explanation of the condition of the patient in her pelvis. The liver was very much enlarged, the anterior border of the right lobe being quite free, soft, and natural to palpation, but displaced downwards nearly as low as the anterior superior iliac spines. Owing to the distension I could not define the left lobe by palpation, but percussion showed that it also was enlarged. No definite diagnosis was made, but I thought the mischief was due to something in or behind the liver, which was pushing its lower border, and especially the right lobe, downwards. Treatment was directed to relieving the distension and supporting the strength of the patient, and sometimes the flatulence dispersed, the abdomen becoming flat, but a tendency to tympanitis continued to the last. The progress of the case continued to be very rapid, and about a week after I had seen the patient Dr. Mackintosh discovered distinct nodules on the surface of the left lobe of the liver and was able to make an exact diagnosis. The patient died a month after my visit, on Jan. 1st, 1895. After death Dr. Mackintosh obtained permission to examine the body, and found a moderately hard carcinoma, which seemed to have originated on the under surface of the liver in the region of the portal fissure. There were cancerous nodules scattered through the whole organ; but these were more numerous in the left lobe, fewer and apparently of more recent development on the right side. Dr. Mackintosh attributed the profuse discharge of mucus from the bowel to congestion of the intestine from pressure on the portal vein, a view with which I fully agree. No cancer was found in any other part of the body. There is a considerable resemblance clinically between this case and that of the patient whose abdomen I explored, as above related; and if we accept the view that pressure on the portal vein was the cause of the exhausting discharge in Dr. Mackintosh's case it is obvious that a tumour more deeply placed in the liver substance might have led to a more prolonged illness, and might have induced death without yielding any signs by which a positive diagnosis could be made during the life of the patient, as in the first case.

CASE 2. *Exploration; malignant disease of the liver.*—My second exploratory operation was performed on a patient about sixty years of age, who was under the care of Mr. Evans of Clapham-common. She had suffered from pain in the neighbourhood of the gall-bladder with liver symptoms of many years' duration, and Dr. George Harley had seen her and had advised that an exploratory operation should be performed. When I saw the patient on Jan. 22nd, 1892, she was emaciated and intensely jaundiced. The liver edge was somewhat lower than it normally should have been, and immediately below it, in the position of the fundus of the gall-bladder, there were two very hard substances, about the size of hazel-nuts, which lay close to the abdominal wall and exhibited some mobility on each other. They felt very like two calculi in the gall-bladder. I made an incision through the abdominal wall just large enough to admit my finger, and on examining the parts I found that the two hard substances were growths standing out from the lower surface of the liver close to its anterior border, and that there were many nodules scattered over this surface as far as my finger could reach. The upper surface showed no irregularity of outline. The gall-bladder was not distended. As the disease was evidently malignant I at once sewed up the wound. The operation gave rise to little disturbance and the incision healed without trouble, but the patient became gradually weaker and died of asthenia on March 5th, six weeks and a day after the operation. When I had examined the parts with my finger inside the abdomen in this case I at once observed that calculi in a gall-bladder could not have remained in position close behind the abdominal wall without being fixed in some way, and there had been no

[1] A paper read before the Medical Society of London, Feb. 25th, 1895.

evidence of distension of the gall-bladder or of any condition that would place and firmly hold two calculi fixed in the fundus.

CASE 3 *Exploration; malignant disease of the pancreas and duodenum.*—A third case on which I operated may be regarded as one of exploration of the gall-ducts. The patient had intense jaundice and a large ovarian tumour which prevented any satisfactory examination of the hepatic region. I removed an apparently simple ovarian cystoma, and found that the patient had also a malignant growth of the pancreas. There was no trouble from the operation, but the patient died five weeks after from asthenia, and at the necropsy it was found that the pancreatic tumour involved the descending portion of the duodenum, which was converted into a tube of cancerous tissue so thin in parts that it appeared to be just on the point of bursting. (The case is fully reported in THE LANCET of Sept. 8th, 1894.)

CASE 4. *Three operations for hydatids of liver and of subperitoneal connective tissue.*—My first case of hydatids was sent to the Samaritan Free Hospital in November, 1890, by Mr. Starling of Charlton. The patient, who was then thirty-three years of age, complained of having "lumps" in the upper part of her abdomen, and said that she had suffered from crampy pains in the bowels from time to time for sixteen years. These pains had become more frequent and more severe, and she had first noticed the tumours when she was carrying a child that was born two years before I saw her; but two years before that time Mr. Power of East India-road, who attended her in her first confinement, told her that she had a tumour, for which he recommended her to seek treatment in some hospital. On examination I found an oval mass at the back of the abdominal cavity a little below the position of the left kidney, somewhat movable, but too small and deeply placed to allow of an opinion being formed as to the presence or absence of fluctuation in it. A little to the right of the normal position of the gall-bladder there was another tumour, rather larger than the first, attached to the lower surface of the liver and distinctly fluctuating. After the patient had been under observation for some weeks a third tumour was discovered a little to the left of the middle line and fixed to the lower edge of the liver by a band-like attachment about half an inch long. All these swellings rapidly increased in size, and in February, 1891, the left one was rather larger than a healthy kidney; the right was nearly round and measured four inches in diameter. On percussion it exhibited the peculiar thrill of a hydatid cyst. The more central growth measured about two inches and a half from above downwards and about two inches across. The liver dulness began at the level of the nipple above. Immediately below this point an absolutely dull note was elicited for nine inches, as far as the lower border of the largest swelling, the patient being rather a small woman. To the right and left of this swelling the liver dulness was lower than normal, but the note was resonant over the two smaller tumours. The whole abdomen was slightly distended. At the back the liver dulness was absolute for one inch and a half above the border of the ribs on the left side, and the upper border of the dull area as it crossed over to the right passed gently upwards and round to the nipple line in front. The uterus was anteflexed, and there was some endometritis. I thought I could feel both ovaries, of about the usual size and in their proper positions, but somewhat tender to palpation. The patient said she seldom had any cough or expectoration. At the right apex there were some crepitations heard on auscultation, but otherwise the lungs were normal. The apex beat of the heart was displaced upwards and to the left, but the cardiac sounds were normal, and the pulse was fairly strong, beating 84 to the minute. The action of the bowels required to be assisted by medicine and the patient was thin and losing flesh, but except for the conditions related she seemed to be a healthy woman. The kidney action was good. There was nothing in the patient's history to show how she had become infected by hydatids; she had lived in Woolwich all her life, and said she had never had anything to do with dogs or animals of any kind. Her husband was a waterman.

I operated on Feb. 17th, 1891, making an incision in the middle line of the upper part of the abdomen. After exploring the parts I first removed the growth from the left loin. It lay in the connective tissue behind the peritoneum, its connexions being easily separated except posteriorly, where they were more dense and much more vascular, so that numerous vessels required to be ligatured, although I did not tie them until the end of the operation in the hope that pressure by forceps might arrest the bleeding. I attempted to remove the cyst unopened, but I had to use a good deal of force, and it unfortunately burst. There was little of the contents spilled over the peritoneum, however, because the sac was ruptured by considerable pressure, and the fluid was in great measure, if not entirely, discharged outwards. The tumour consisted of a single sac, having the characteristic lining of membranous tissue formed by the parasite surrounded by the usual adventitious fibrous capsule developed by the host. It contained no daughter cysts. I next took out the smaller of the cysts below the liver. It seemed to be outside this organ, but connected with it by a kind of pedicle, which I tied as I would tie the attachment of an ovarian tumour. This hydatid contained daughter cysts. The largest of the tumours was in the liver substance. I cut into it and removed much fluid and numerous daughter cysts, taking great care to keep the peritoneum clean by means of sponges packed round the opening. When I had removed most of the contents of this cavity I again explored the abdomen and found that there was a chain of hydatids running backwards along the lower surface of the left lobe of the liver. Some of these I enucleated, but the manipulation became more difficult as I had to follow the cysts deeper, and when the patient had been about three hours on the table I felt compelled to desist from further attempts. It was obvious that there were more cysts in various parts of the peritoneum, and that there were other cysts in the liver substance. A very long time would have been necessary to deal with them all, and the patient's condition did not warrant a continuance of the operation. I was, however, able to separate two of the chain of hydatids at which I was working without opening either of them. I washed out the empty cyst cavity in the liver with iodine and water, sewed its opening to the opening in the abdominal wall so as to make a sinus, and closed the rest of the incision in the usual way. Two drainage-tubes were passed through the sinus into the cavity, and the wound was dressed with a large quantity of carbolic gauze. The patient was on the operating table nearly three hours and a quarter. She quickly recovered from the chloroform, and convalescence took place without causing any serious anxiety. The temperature rose to 103·6° F. in the vagina and the pulse to 120 twenty-four hours after the operation. The temperature then fell and fluctuated between 99·6° and 101° for three weeks, after which time it was below 100° and the pulse was below 90. There was some difficulty with the bowels during the first nine days; but afterwards they moved freely, and the patient then had only to contend with the weakness natural after such an operation and with some bronchitis. The discharge from the wound was never very copious, but the incision did not completely heal for nearly three months, although long before this the patient had gained strength and put on flesh, and was able to get about freely. She left the hospital in the eleventh week after the operation. She remained under my observation, and soon after she went home the upper part of the right side of the abdomen began to enlarge again, and there was much colicky pain in the abdomen, especially after food. The bowels still required to be assisted by laxatives, but they acted better than before the operation. Menstruation was regular.

The patient was readmitted to hospital on Nov. 20th, 1891, nine months after the first operation. The right costal margin was then much more prominent than the left, the greatest measurement from the spine to the middle line in front being seventeen and a half inches on the right side and sixteen inches at the same level on the left. The scar was very wide at the part where the tubes had been, and was dragged considerably to the right of the middle line. To the left of the scar, and close to the costal margin, there was a rounded swelling measuring about two and a half inches across and standing about an inch out from the surface of the abdomen. To the right there was a large, smooth, rounded swelling reaching well down towards the pelvis and filling the whole of the right side. These swellings exhibited the thrill on percussion that is characteristic of hydatids; they were evidently in, or closely connected to, the liver and they were dull on percussion except at their lower margins, which were rounded and partially overlapped by the intestines. Above the costal margin the percussion note was absolutely dull as high as the level of the nipple in front, and was impaired up to

the second intercostal space on the right side. The absolute dulness behind was bounded above by a line crossing the middle line at the level of the spine of the sixth dorsal vertebra, and gradually curving downwards on the left. The lungs were very greatly compressed, and there was considerable cyanosis, but I detected no signs of active lung disease, and although there was a slight cough there was no expectoration. The heart's action was fairly good, the pulse usually beating 72 times to the minute. The apex beat was felt six and a half inches from the middle line in the fifth interspace. The temperature was normal or subnormal. In the right side of the pelvis a small tumour was felt by bimanual examination, exactly resembling an ovarian tumour and about the size of an orange. On Dec. 2nd I carefully opened the abdomen by removing the old scar. After freeing some omental adhesions I exposed the smaller and more prominent cyst. This I aspirated, laid open, and cleared out in the same way as I had treated the liver cyst at the first operation. It contained numerous daughter cysts. When all was clear I made a careful examination of the abdomen and found a number of small tumours low down in the pelvis. I counted five. Leaving them I returned to the liver and cut into the large cyst on its inner side, where it bulged into the one already opened. A very great quantity of fluid and daughter cysts was removed, but the bulk was not measured, as much of it was caught in towels and thrown aside. The size of this cavity may be estimated by the fact that after it was partially collapsed my sponge forceps, which measure eight and a half inches beyond the handles, did not reach a large part of the upper and posterior boundaries of the sac. It was with much difficulty that I got the parasitic sac of the main hydatid cyst away. This was very thick and firm, and would not fold up sufficiently to come through the opening until I had many times seized it and brought away small pieces. At last I succeeded in removing the bulk of it in one mass, but many small pieces were afterwards washed away with iodine and water. When the cyst was thus partially cleared the patient was so blue and collapsed that it was out of the question to attempt to remove the other tumours. I therefore sewed the opening in the liver to that in the abdominal wall, and closed the incision, draining the liver cavity and dressing the wound as at the first operation. This second operation lasted an hour and a half. The temperature rose to 102° on the day following the operation and again on the fifth day, the pulse on the first of these occasions being 120 and on the second 96. The respirations were not counted above 32 to the minute. There was an occasional cough and considerable dyspnœa, but very little expectoration, or other evidence of bronchitis. The lung resonance quickly increased, and there was marked tenderness on percussion over the upper surface of the liver for some days. The cyanosis and breathlessness disappeared very gradually, and the feebleness, which was extreme for more than a fortnight, was also slowly recovered from. The bowels again gave a good deal of trouble for a little more than a week, but when they acted freely the patient gained strength more quickly. The discharge from the liver was very profuse, and at times it contained a great deal of bile. Hydatid membranes escaped in considerable quantity at first, and later at intervals, the last observed coming away on Feb. 13th, 1892, two months and eleven days after the operation. On the twenty-fifth day the drainage-tubes, which had already been considerably shortened, were taken out and cleaned. The longest measured ten inches. They were gradually shortened, and on Jan. 20th one tube was removed. On March 18th there was only one small tube remaining, which measured two and a half inches in length. On March 3rd the patient was allowed to get up, but the wound was still discharging a large quantity of fluid, which was now of a thin, serous character. She went home on April 2nd, four and a half months after the operation. The wound continued to discharge very freely till about Christmas, 1892. About the beginning of December the quantity of discharge began to diminish and the wound healed very quickly and has given no trouble since; it had been open over thirteen months. When the wound healed the patient was about three months advanced in pregnancy, and I am inclined to think that the upward pressure caused by the enlarging uterus facilitated the healing of the wound. After the patient went home she had much colicky pain in the abdomen, but she said she felt better while carrying her last child than in either of her other pregnancies. After the child was born the patient became weaker and thinner and had more pain, and on examination from time to time it was evident that the pelvic tumours were increasing in size.

The patient was readmitted on March 6th, 1894. At this time, except for the presence of the cicatrix, the abdomen was quite normal on inspection, but on palpation I mapped out three very tender rounded swellings in the right side, the lowest being close to the pelvis; the highest was the largest and was the size of a small orange. The whole abdomen was resonant on percussion and the liver dulness began at the level of the fifth rib and ceased a little above the costal margin below. By combined vaginal and abdominal examination I found that there were several cysts in the pelvis, but I was not able to say how many. The lungs were resonant everywhere, but the respiratory sounds were not nearly so free on the right side as on the left, and the patient now frequently suffered from bronchitis. On March 12th, two years and three months after the second operation, I again opened the abdomen, making the incision on this occasion below the umbilicus. The three tumours in the right loin and four in the pelvis were brought out and enucleated. Each consisted of a hydatid membrane, containing very little fluid, but full of collapsed daughter cysts and enveloped in an adventitious fibrous capsule. They were attached to subperitoneal connective tissue and to neighbouring structures. A fifth cyst in the pelvis was so closely connected with the back of the cervix uteri that I cleaned it out and drained it as I had treated the sacs in the liver. The cysts removed varied in size from that of a large orange to that of a duck's egg. Before closing the wound I examined the lower surface of the liver and found some more hydatids under the left lobe, evidently the remains of the chain I had felt at the first operation, but they had considerably enlarged. It was impossible to manipulate these through the incision already made, and I therefore cut directly down on them by a vertical incision a little to the left of the middle line and close to the ribs. Three hydatids were removed from close to the lower surface of the liver, two being about the size of duck's eggs and one the size of a sparrow's egg. The liver seemed to be of fairly normal shape and freely movable, having only loose adhesions to the scar, the upper end of which was considerably below the lower edge of the liver. Through these loose adhesions I felt a hard nodule which I thought was another small hydatid, but it was enveloped in adherent omentum, and as the operation was already a long one I thought it unwise to begin what might be a very troublesome and prolonged enucleation. This operation lasted over three hours, but it was not such a severe proceeding as either of the other two, and the patient was not so ill afterwards. During convalescence the highest temperature was 100·8° F. on the fourth day, and the highest pulse was 96 on the second day. The patient was almost free from fever and practically well after ten days, but there was a discharging sinus till June, when the wound finally healed. On leaving the hospital early in June the patient went to a convalescent home for a few weeks, and was very well while there; but after going to her own home she was for long troubled by a cough, sometimes accompanied by considerable expectoration. On Oct. 25th she came to see me on account of a small hernia at the lower end of the incision below the umbilicus. This had been noticed for five weeks, and was no doubt due to the persistent cough. The lungs were not dull on percussion anywhere, but the liver dulness was somewhat higher than it should have been on the right side posteriorly, and the respiratory murmur was everywhere very feeble. There were very few crepitations or râles, and at this time there was little expectoration.

I again saw the patient on Feb. 21st, 1895. She then complained of severe pains in the region of the liver, which had continued for about seven weeks and were very bad during the prolonged frost, but had been rather better since the weather became milder. On examination I found the abdomen quite flat; the incisions measured 3½ in., 3 in., and 2¼ in. respectively, in the order in which they were made. The patient's cough had been much less frequent, and the hernia, which had been supported by a pad, was smaller and caused little trouble. The liver near the middle line was very tender to percussion and palpation. Through the scar of the second operation I could feel a hard nodule about the size of a bean, which seemed to be the chief seat of tenderness, and I have no doubt this was the hard substance I had felt at the end of the last operation. The liver seemed to be smaller than normal in front, but its dull area extended rather higher than usual behind. The lungs had

greatly improved, and, except at the right base behind, the air everywhere entered them freely. Since the severe pain in the liver region began some eight weeks previously the patient said she had lost flesh and she was very thin. It seemed as if some cyst were developing in or below the liver. I hope to keep the patient under observation, and if there is any further development I trust that I may be permitted to communicate the sequel.

(To be continued.)

THE PHYSICS OF CARDIAC SOUNDS AND MURMURS.

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MORE than twenty years ago Dr. Walshe wrote[1] that "the difficulty of unravelling the mechanism of the normal sounds of the heart is broadly and emphatically proved by the fact that from the time of Laennec to the present day some five-and-thirty theories, more or less completely differing from each other, have been proposed in its explanation." During these last twenty years the problem has still remained unsatisfactorily solved. I propose in the course of this paper to relate a few simple experiments which bear on the subject, and which appear to throw a great deal of light not only on the mechanism of cardiac sounds, but likewise on that of cardiac murmurs, and which, moreover, have the advantage from their great simplicity to be within everybody's reach. It will be advisable to study first the second sound. If after excision of the heart the aorta be firmly ligatured at a short distance from the semilunar valves, and, the left ventricle having been opened, a stream of water be forcibly driven by means of an indiarubber syringe into the aorta from the ventricle, then the following takes place: the aorta becomes distended with liquid, and in the height of its distension the semilunar valves close in and shut the ventriculo-aortic orifice so that not a drop of water escapes back into the ventricle. From the ventricular side the valves are thus seen stretched by the fluid contained within the aorta. The semilunar valves have thus been shut by a forcible injection of liquid directed from the ventricle towards the aorta. In this experiment the ligature of the aorta is made to represent the resistance offered by the column of blood in the living subject; the stream of water injected forcibly into the aorta takes the place of the ventricular contents that normally pass into the vessel with each ventricular contraction; and, lastly, the indiarubber syringe is made to represent the ventricle. How is this closure of the semilunar valves brought about?

Physiologists hold that the semilunar valves are "probably closed almost immediately after the escape of the ventricular contents,"[2] and assign this closure to the refluxes produced by the negative pressure of the mere movement of the column of blood and by the elastic recoil of the arterial wall. Now, in the experiment just referred to the "negative pressure of the mere movement of the column of blood" cannot be a factor of the closure of the valves, for the simple reason that the ligature of the aorta prevents any such movement taking place. That the closure of the semilunar valve is likewise completely independent of the elastic recoil of the arterial wall the following modifications of the above experiment will plainly show. Let a part of the aorta together with the rim of the ventricle near the aortic orifice be dissected out; let a piece of linen be now sewn round the aorta from the level at which the extremities of the valves are attached to the wall of the vessel outwards, sufficiently close to prevent distension of the artery, but not too tight to occlude its lumen; if now, after ligaturing the vessel, water be forcibly driven into the aorta from the ventricular side the vessel fills with fluid and the semilunar valves close the orifice. Here no recoil of the arterial wall can come into play, inasmuch as its distension is prevented by the linen sewn round it, yet the valves close and shut the orifice. Again, if the aorta be ligatured as before, some distance beyond the orifice, and, the ventricle having been opened, a column of air is forcibly driven into the aorta from the ventricle by means of a gum elastic syringe, the following takes place: the vessel dilates somewhat, and the valves not only close in perfectly well, but even bulge prominently backwards towards the ventricle. Here, once more, no recoil of the arterial wall can explain the closure of the valves, as in order to produce this effect it is not necessary to drive the column of air too forcibly into the aorta so as to produce marked distension of the wall. The closure of the semilunar valves can thus be brought about irrespective of the refluxes produced either by the recoil of the arterial wall or by the negative pressure due to the mere movement of the column of blood. How, then, is this closure effected? The circumference of the aorta at the level of insertion of the extremities of the semilunar valves may be divided for purposes of description into three equal parts, the points of division corresponding to the points of insertion. If direct lines be drawn across these points of insertion an equilateral triangle will be described within the circumference of the aorta, the sides of the triangle corresponding to the loose edges of the semilunar valves. This is at once made apparent if, a part of the aorta having been dissected out together with the rim of the ventricle surrounding the orifice, dilatation of the vessel be effected by means of the fingers from *both* sides of the orifice at the same time. It is then seen that in the dilated state of the vessel a triangular lumen occupies the centre, and the space between the sides of the triangle and the circumference of the vessel is occupied by the somewhat lax semilunar valves. It is likewise to be observed that the edges of the valves in their lax condition dip downwards concavely between their extremities disclosing the aortic wall, which at this level is thinner and encloses a wider lumen than at the level of insertion of the extremities of the valves and upwards. When, therefore, water is forcibly injected into the ligatured aorta from the ventricle the wall of the vessel becomes distended; this distension, *per se*, by separating from each other the extremities of insertion of the valves, causes the edges of these to assume collectively the sides of an equilateral triangle, the interior of which forms the lumen of the vessel at its orifice, a space occupied by valvular surface being left between the sides of the triangle and the distended wall of the vessel. Now, according to Pascal's law, pressure exerted anywhere upon a mass of liquid is transmitted undiminished in all directions and acts with the same force on all equal surfaces and in a direction at right angles to their surfaces. Therefore, the same amount of liquid pressure that, acting at right angles to the wall of the aorta, produces its distension will also act at right angles to the exposed valvular surfaces which extend from the sides of the triangle to the circumference of the vessel, this exposure of valvular surfaces being due, as just stated, to the distension of the aorta. The liquid pressure on this exposed valvular surface will bring about the stretching of the valves; and this stretching of the valves in its turn forces them to adopt the pouch-like form which they owe to the concavity of their bases of attachment. The liquid pressure which is being transmitted equally in all directions tends to separate these pouches more and more from the sinuses of Valsalva, this separation from the sinuses causing the pouches to approximate each other, until at last they touch and close the orifice. But this approximation of the valves being due to their separation from the circumference of the vessel, and this separation being in its turn due to the fluid pressure which is being exercised in all directions by the water which is entering the aorta from the ventricle, it follows that the closure of the semilunar valves is effected solely by the injection of water into the aorta. During the height of the distension outwards of the aortic wall, does the distension inwards and backwards of the valves take place, both being effected by the same liquid pressure? The distension inwards and backwards of the valves being effected by the column of water entering the aorta, it is clear that this column (in its latter part) as it enters the aorta by this very act is closing the orifice against itself. When the last drop has passed the orifice the valves firmly close upon each other, this last drop being the end of that column of water which directly produces the closure of the valves. In that modification of the experiment, where the sewing of a piece of linen into and around the wall of the vessel from the level of insertion of the extremities of the valves upwards prevents the distension of the aorta from that level upwards,

[1] Dr. Walshe: Diseases of the Heart, p. 51.
[2] Text-book of Physiology (Foster), p. 246.

the injection of fluid, though unable to distend that part of the vessel, distends, nevertheless, the portion below it—that is, immediately behind the valves—and thus separates these from the sinuses of Valsalva, causing them to adopt the pouch-like form and eventually to close the orifice. But here also the closure is effected directly by the injected liquid.

The first experiment illustrates well what actually takes place in the living heart. The first effect of the ventricular contraction is to separate asunder the semilunar valves; the ventricular blood rushing into the aorta brings about the distension of this vessel. This distension, owing to the anatomical relations existing between the valves and the wall of the aorta, places the valvular pouches in conditions favourable to their being distended inwards and backwards by the same inrushing ventricular blood, this latter distension closing the orifice *pari passu* with the ingress of the last portion of the ventricular column, the ingress of the last drop being coincident with the firm closure of the valves. It is thus demonstrated that the semilunar valves are closed *directly* by the ventricular contraction before any negative pressure of the mere movement of the aortic column can come into play, and certainly before any recoil of the arterial wall is exercised. The contraction of the ventricle is then the direct cause of the closure of the semilunar valves. It has been alleged that during the contraction of the ventricle the semilunar valves are never kept perfectly separated from each other, but that their position is one of semiclosure during the act. Were this a fact then a murmur would always accompany the ventricular systole, for the alleged position of the valves would of necessity give rise to a murmur. In order that the semilunar valves may be even partially closed during the ventricular contraction it is necessary that the aortic wall be fully dilated first so as to afford a fixed support against which the fluid pressure can sustain itself while it reacts against all parts which are not fixed, and it is thus that it reacts against the semilunar valves until they attain a fixed posture in their closed state. But this full dilatation of the aortic wall cannot take place till the end of the ventricular contraction, for the first and greater portion of the ventricular column is expended partly in propelling the aortic column directly onwards, and partly in distending the aortic wall; it is only the latter and shorter portion of the ventricular column that brings about the full distension of the aorta, which extreme distension, as we have seen, must first take place before the fluid pressure brought about by the ventricular contraction can avail itself of the anatomical relations existing between the aortic wall and the semilunar valves, so as to commence and finish the closure of these valves. The semilunar valves are completely pushed asunder by the entrance of the ventricular column into the aorta, and it is only as the latter end of this column is leaving the ventricle that the valves rapidly close in and shut the aortic orifice. Such being the direct cause of the closure of the semilunar valves, it remains to ascertain what is the direct cause of the sonorous vibrations which, produced in these valves, give rise to the second sound.

It is generally held that the sonorous vibrations of the semilunar valves are effected by the recoil of the elastic aortic wall. It is easy to demonstrate that this view of the mode of production of the second sound involves a physical impossibility. If a small elastic balloon, such as children play with, be somewhat distended with water and then tied at its orifice, and if now the end piece of a binaural stethoscope be applied to any part of its surface, and pressure be suddenly made upon the balloon, the elastic membrane will bulge forcibly outwards at the point where the stethoscope is applied, but no sound will be produced. The same observation, with the same result, can be made with an ox's bladder; but in the case of the elastic balloon the thinness of the wall approximates itself more closely to the physical condition of the semilunar valves. The experiment can yet be more advantageously effected with a piece of the fresh small intestine of an ox. If a small piece of this intestine be somewhat distended with water, and after its two ends have been ligatured the end piece of a binaural stethoscope be applied to any part of its surface; if now, sudden and forcible pressure be made on any part of the intestine the other part will be rapidly and forcibly distended, but no sound will be emitted. It is thus demonstrated that a membrane possessing more or less the same physical characters as the semilunar valves does not emit a sound when it is forcibly distended by a mass of liquid which it encloses. The semilunar valves being perfectly closed before the recoil of the aortic wall comes into play, and therefore, during that recoil, forming part of a membrane which encloses liquid, may receive a second distension owing to the mass of liquid which will be pushed against them by the recoil, but cannot through this distension be thrown into sonorous vibrations. The recoil of the aortic wall cannot, therefore, cause the semilunar valves to emit a sound. For the same reasons neither can the negative pressure of the moving aortic column be the direct cause of the second sound.

It might be supposed that the second sound could be produced by eddies created at the aortic orifice during the latter part of the passage of the ventricular column into the aorta; that these eddies would strike against the aortic surface of the valves, and thus give rise to the sound. That this is not so may be easily demonstrated. If a small piece of fresh intestine of an ox be filled with water and tied at both ends, and an indiarubber syringe be filled with a strong solution of permanganate of potash and in this state its nozzle be introduced into the intestine filled with water through one of its ends by loosening the ligature and then tying it tightly again over the nozzle; if now the intestine be held upwards against the light and the contents of the syringe be suddenly and rapidly injected into the intestine the wall of the intestine is seen to bulge outwards, the coloured solution is seen to go directly upwards and no eddies are seen to be produced immediately at the orifice of the nozzle. This observation can likewise be made with a transparent elastic balloon instead of a piece of intestine. It might once more be supposed that the second sound would be produced by molecular changes in the so-called fluid veins at the aortic orifice. Whatever be the character of the sonorous vibrations to which these fluid veins give rise, that they do not constitute the second sound may be demonstrated by filling a small piece of intestine with water, inserting into one of its ends the nozzle of an indiarubber syringe likewise filled with water, and firmly ligaturing both ends of the intestine; if now the end piece of a binaural stethoscope be applied to the intestine immediately behind the orifice of the nozzle and the syringe be rapidly compressed no sound whatever is heard at the indicated spot—in other words, the fluid veins have not given rise to a sound. Having thus shown how the second sound is not produced I will now endeavour to demonstrate what is its direct cause, and in doing so I will relate a very simple experiment which illustrates the mode of production of all cardiac sounds and murmurs.

Let a small piece of fresh intestine from an ox be filled with water, and through one of its ends let the nozzle of a good-sized indiarubber syringe, likewise filled with water, be introduced; let both ends of the intestine be firmly ligatured. If now the end of a binaural stethoscope (and this kind of stethoscope is recommended as it leaves the hands of the experimenter free) be applied to any part of the intestinal surface and the syringe be forcibly compressed no sound is heard, or at best only a very weak rumbling noise. If now the nozzle of the syringe, instead of lying in the axis of the intestine, be directed so that the column of water issuing from it strikes the intestinal surface at any angle whatever, the acoustic phenomena completely change. If the end piece of the stethoscope be now applied near the orifice of the nozzle, so that the column of liquid issuing from the nozzle will either strike it at any angle whatever, or will strike any portion of the intestinal surface between it and the orifice of the nozzle, the following acoustic phenomena are produced, according as the indiarubber syringe is compressed forcibly and rapidly or not. If the syringe is compressed rapidly and with some force a distinct highly pitched sound is produced; if the compression is effected with great force as well as rapidity, then a loud sound is produced, but of the same pitch as before. If the compression is effected slowly a soft blowing murmur is produced; if the compression be effected a little faster and with a little more strength, then a rough murmur is produced. The same observations can be made with an elastic balloon. If, instead of the thin-walled intestine, the experiment be performed with the thick-walled aorta of an ox, the same acoustic phenomena will be produced, with the exception that the sound emitted in this case is of a lower pitch than that produced in the case of the thin-walled intestine. It is therefore a physical law that when a membrane enclosing a liquid receives on its internal surface a *stream* which impinges against it, at any angle whatever, it will be thrown into sonorous vibrations, these vibrations giving rise to a sound when the stream

impinges with rapidity and force, the pitch of which sound will depend upon the relative thinness of the membrane (the thinner the membrane the higher the pitch), and the intensity of the sound will depend upon the force with which the stream is emitted; the vibrations giving rise to a soft blowing murmur when the stream impinges with little rapidity and force, and to a rough murmur when this rapidity and force are somewhat increased. These are principles the truth of which can be ascertained by everybody, as the elements with which the observations can be made are within everyone's reach. The question now arises whether the conditions which in the experiment give rise respectively to sounds of different pitch, as well as to murmurs of different character, are present in the normal and in the pathological heart. The answer will be seen to be in the affirmative.

It has been seen that during the first part of the ventricular systole the aortic orifice remains perfectly patent, and that it is only during the latter part of the contraction, after the aorta has been well distended, that the semilunar valves, owing to the anatomical relations already described, suddenly close in and shut the orifice. Now this sudden closure of the valves, taking place at the time when a stream of liquid is passing from the ventricle into the aorta, forces this stream to impinge against the ventricular surface of these valves; this stream being produced rapidly and suddenly by the rapid contraction of the ventricle, the semilunar valves being constituted by a thin membrane. Here are all the conditions present for the production of a high-pitched sound exactly similar to those which were present in the experiment with the indiarubber syringe and the intestine, and in point of fact both sounds resemble each other very much. There is, therefore, sufficient ground to conclude that the second cardiac sound is directly produced by the latter part of the ventricular contraction owing to the semilunar valves being thrown into sonorous vibrations by the latter part of the ventricular stream impinging against the ventricular surface of these valves in the act of their closing in. The degree of intensity of the second sound depends then solely upon the degree of hypertrophy of the respective ventricle; the pitch of this sound will depend upon the relative thinness of the semilunar valves. When these valves are normal the sound will be high-pitched, but when these valves become thickened through inflammation then the pitch will be lowered. The presence of an aneurysm *per se* cannot give rise to a real accentuation of the second sound; if the aneurysm protrudes forward then there will be an apparent accentuation of the second sound, simply because then the acoustic media of conduction are more favourable than normally for the propagation of the ordinary sound to the listening ear. Likewise high tension of either circulation *per se* cannot intensify the second sound. Under these conditions the second sound will be accentuated only when the high tension has caused the respective ventricle to hypertrophy. These are logical deductions from ascertained physical phenomena, which render more accurate the physical diagnosis of the conditions of the ventricular muscles and of the semilunar valves.

Now follows the examination of murmurs produced at the aortic orifice. Murmurs have been supposed to be produced by fluid veins created during the passage of a stream from a narrowed orifice into a wider channel. In the experiment described above, when an indiarubber syringe filled with water has its nozzle introduced into a piece of small intestine also filled with water and having both its ends ligatured, as long as the nozzle is held in the axis of the intestine the syringe may be compressed in any form and yet no distinct murmur will be imparted to the stethoscope placed over any part of the intestinal surface. Yet in this experiment having a stream issuing from the narrow nozzle into the wide intestine there are exactly the conditions which have been supposed to give rise to murmurs. The mode of production of a murmur is otherwise. As already described, if the nozzle of the syringe is directed so that the stream issuing from its orifice shall impinge against the intestinal surface, no matter at what angle, a high-pitched sound is heard when the syringe is rapidly and forcibly compressed, which changes into a murmur when the rapidity of the compression is diminished. It is demonstrated, therefore, as a physical fact, that a stream of liquid slowly impinging against a membrane will throw it into such sonorous vibrations that these will impart to the listening ear the sensation of a murmur. Stenosis of the aortic orifice is known to produce a murmur described as systolic murmur at the base. How is this murmur brought about? The narrowing of the aortic orifice prevents the ventricle from contracting rapidly, because the ventricular column requires more time to pass through a narrowed than through a patent orifice. Again, in stenosis there is a surface of membrane which from the beginning of the ventricular contraction is so placed that it will receive against itself part of the ventricular stream as it passes through the narrowed orifice. There are here, then, the two necessary elements for the production of a murmur: a slow issuing—that is, a prolonged stream—and a membrane against which it impinges. If the prolonged stream issues forth with great force a rough murmur will result; if with less force a blowing murmur will take its place.

If an aneurysm with undistensible walls be situated just beyond the aortic orifice a murmur may occur during the contraction of the ventricle, not because a stream issues from a relatively narrow orifice into a wider channel, but because the want of distensibility of the aneurysmal wall is an actual obstruction to the rapid voiding of the ventricle, and it is an obstruction because, whereas normally a great part of the ventricular column goes to dilate the first part of the aorta, when this aorta, owing to an undistensible aneurysm, cannot distend, then the ventricular column must progress solely in an onward direction, which implies more time in the voiding of the ventricle. Again, owing to the undistensibility of the aortic aneurysmal wall, the fluid pressure caused by the entering ventricular column will from the very first have a fixed support against which it can sustain itself while it reacts on the unfixed semilunar valves, separating these from the aortic wall and tending to their closure. Under these conditions the semilunar valves will be partially closed during the greater part of the ventricular contraction. There are present, therefore, the two necessary elements for the production of a murmur—a prolonged ventricular stream and the semilunar membranous surface against which this stream will impinge during the prolonged ventricular contraction. It will be likewise seen that the same murmur must take place even in the absence of an undistensible aneurysm, provided that the aortic walls through disease are incapable of distension, and under this condition the murmur must take place although the semilunar valves be perfectly healthy. If the semilunar valves are completely destroyed and the aortic rim does not in any way protrude inwards so as to form a membrane, then the ventricular contraction cannot give rise either to a sound or to a murmur, for one of the necessary elements for the production of either a sound or a murmur is wanting here—viz., a membrane against which the stream can impinge.

(To be continued.)

DISTURBANCE OF THE CARDIAC RHYTHM AND PULSE

DUE TO IRRITATION OF THE ALIMENTARY TRACT, AND THE INFLUENCE OF OPIUM THEREON.

BY GORDON SHARP, M.B. EDIN.

IT is a well-known physiological fact that the vagus centre may be stimulated reflexly, producing slowing or stoppage of the heart, this stoppage being sometimes temporary, but at other times permanent. The nucleus of the fifth nerve and the nucleus of the vagus lie near each other, hence stimulation of the fifth nerve may stimulate reflexly the vagus and so affect the heart. But powerful stimulation of any sensory nerve may produce a similar result, as also stimulation of the sympathetic nervous system, especially the abdominal sympathetic nerves. Anyone who has performed physiological experiments knows that if a frog be pithed, the abdomen opened, and a coil of intestine sharply pinched the heart rhythm is often disturbed and there may be a momentary full stoppage of the organ, or, indeed, the stoppage may be permanent. During the past two or more years I have observed cases in which the regularity of the cardiac rhythm has been interfered with, due, I believe, to reflex stimulation of the vagus centre through the vagus nerve itself or through the abdominal sympathetic, most probably the latter. In all the cases the stimulating agent was in the shape of a catarrh of the stomach and bowels, or one of these, or the presence of some irritating body in the alimentary canal, or a constricting

body, or an inflammation of a part of the alimentary tract. In all, pain was a prominent symptom, and for the relief of this opium was employed, either in the shape of pill or tincture, and with beneficial effect as regards the pain and heart condition. This illustrates the value of pain as a symptom of disease, especially when the pain is severe. It calls for speedy relief, and the attainment of this places the patient on the high road towards recovery, and it gives the physician time and opportunity to investigate the true nature of the disease. Now abdominal pain is peculiarly amenable to treatment by opium, not the morphine salts or the expensive fanciful preparations bearing names borrowed from the ancient classics, but the old-fashioned drug. Morphine salts rapidly go the round of the circulation, and where one wants general analgesic effects they answer well, but where local effect is desired in the first instance the crude drug is the best agent to employ. The local action of opium in pain affecting the stomach and bowels is probably dependent on the fact that when it enters the stomach it forms (because of its astringency) a coagulum with the mucus, which is only again slowly broken up in its passage along the alimentary tract, but in the process of breaking up and setting free of the alkaloids an extensive local anæsthetic effect is produced. The result of this is the establishment of the fundamental physiological principle of repair of tissue—namely, rest. It must not be forgotten likewise that opium contains alkaloids other than morphine, and they, too, may play a part in this beneficial action. In addition, there is the astringency of the opium, which must check the secretion of mucus, and this of itself will stop peristalsis, and so another point is gained.

CASE 1.—A man aged sixty-six years was seized with vomiting and diarrhœa following an indiscretion in diet. Having known him for some considerable time I was aware that the heart and pulse presented nothing beyond what might be expected in a man of his time of life, but with the onset of the disturbance of the alimentary tract the heart showed signs of suffering and the pulse at the wrist was 120 and missed a beat in something like every thirteen. The diet was restricted to soda-water and milk, and ten minims of laudanum were prescribed every two hours till the condition improved. In twenty-four hours the heart and pulse had so much improved that only one beat was missed in every fifty or sixty, and with this the diarrhœa and vomiting had ceased. Further improvement followed, but I do not know that ever the pulse became quite regular again, for if the finger was kept on the pulse for a minute or two one beat was lost in every 150 or 200.

CASE 2.—I was called to see a man aged sixty years one afternoon about two o'clock. I had previously attended him and knew that four months before his heart was to all intents and purposes sound. He was the unlucky possessor of double hernia, which gave him no trouble. When I saw him he told me that he had severe pain at the lower part of the right lumbar region, and on examining him I found there was a tender spot of about the size of a penny. The bowels had been well moved some hours before my visit, and about an hour previously to my seeing him he had vomited green, bilious fluid. The pulse was most irregular and beat 86 in the minute. The intermission in the pulse was one in four, one in six, one in eight, one in ten or thereby, but never more than eleven beats followed one another without one being missed. The hernial sites were examined and the herniæ found up. The diagnosis lay between a constriction within the abdomen or commencing inflammatory mischief of the bowel. To relieve the pain was the first consideration, and for this a one-grain opium pill was given at once, and five minims of laudanum were prescribed every hour till the pain abated. At the same time hot linseed-meal poultices placed between two layers of soft flannel were ordered, and were to be repeated every hour. I saw him six hours later and found that the pain had abated, and there was now only tenderness on touching the spot in the right lumbar region; but, what is more important as far as my present purpose is concerned, the pulse had undergone great improvement, and only one beat was missed in 40. In the next twelve hours one beat was missed in 60, and twenty-four hours later the rhythm was re-established.

CASE 3.—A man aged thirty-six years complained of pain in the right side of the abdomen in the line of the colon. The bowels were confined. Vomiting was present, but not severe. There was a certain amount of tenderness, although this was not a prominent symptom. The pulse was only 48 in the minute at the wrist and was intermittent. The man expressed no desire to have the bowels moved, as is so often the case in peritonitis, and no purgative was given. A one-grain opium pill was given, followed in half an hour by five minims of laudanum, and the latter was to be repeated every two hours till the pain was removed or considerably relieved. At the same time poultices were repeatedly applied. Relief followed in a few hours, the pulse became regular, and the man recovered in some days.

CASE 4.—A man aged thirty-four years had severe recurrent colic, and on each occasion of the attacks the pulse was 50 to the minute, and every tenth beat was followed by intermission, which disappeared in every case after he had been placed under the influence of opium. After three relapses the condition was overcome and has not since returned. There was no reason to suspect lead poisoning.

In the first two cases the pulse was rather rapid; moreover, they were severe in type, and this may account for the comparative rapidity of the pulse. The two latter cases showed slow pulse and were not so acute, and would agree with what one would expect theoretically from a reflex stimulation of the vagus centre. In all, the interesting points are the intermission and the fact of it yielding so readily and effectually to opium. Details have only been mentioned in so far as they illustrate the points under discussion.

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MALTA FEVER IN RELATION TO LOCAL SANITARY CONDITIONS, AND THE HERMITE PROCESS.

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THE attention given at present to Malta fever both by the medical profession and by the general public is a sufficient indication of its importance and (paradoxical as it may appear) of the obscurity with which it has been surrounded. It is to the nebulous views which have prevailed as to its causation, and for which the medical profession is in a measure responsible, that is owing the want of sanitary effort to combat the disease. The history of Malta fever is strangely similar to what obtained a few years ago in reference to the increasing prevalence of, and mortality from, enteric fever in India. From time to time various explanations were hazarded to account for the phenomena connected with it; but they had to be discarded, and now the disease is admitted to be in every respect identical with the typhoid fever of European countries, being specific in origin, and traceable to a sewage-polluted soil affecting the water-supply. It is believed that in the near future a like view will be taken of Malta fever and its specific character recognised, the disease originating in local insanitary conditions, and the action of climate in its production being chiefly manifested by its influence on these conditions, and not directly on the constitutions of individuals in the first instance. In this view will be comprised all those diseases of the Mediterranean littoral which are of a febrile character, and which are associated with gastric or enteric symptoms. No observant traveller voyaging between England and Suez, taking Malta *en route*, can have failed to notice the grave sanitary defects of that island and its land-locked and tideless harbours. On all sides he sees conditions favourable to the spread and production of zymotic diseases. These are its geological formation, the nature of the soil, the density of the population, its imperfect scavenging, its water and food supplies exposed to the danger of sewage pollution, and its harbours made pestilential from floating excreta and organic débris of all kinds. The first two conditions may be taken together, for in this case the natural soil, where it exists, has been formed from the wearing away of the rock by climatic influences. About two-thirds of the island are cultivated, and the remaining third consists of barren rock. A shallow soil, imperfectly drained and largely saturated with organic refuse, presents every natural feature favourable to the production and development of the enteric germ. Added to this is the density of the population, which at present (exclusive

of the troops) is over 1330 to the square mile, and it is annually increasing. Much of the refuse is eaten by goats, which are kept in large numbers. It is a reproach to our modern methods of sanitation that nothing is done to arrest the increasing defilement. As long as the harbours of Malta are allowed to continue in their present state there must always be sanitary risk and danger to the public health. Moreover, as these conditions are mainly caused by our own navy and by our mercantile marine, while they are not remedied by what right can we impose sanitary obligations on the civil population? Certainly none. It is a case of putting our own house in order first. The proposal, then, is that the sewage &c. of our ships should be disinfected and rendered innocuous before being poured into the harbours of Malta by the electrolysis of sea water. No better locality could be selected for the trial of the Hermite process than in those harbours and in the Suez Canal. After much experience it is asserted that the health of passengers in troopships would be greatly improved if the ship's latrines, bilges, &c. were subjected to some such process as herein indicated; for, being fitted with steam engines, the cost of plant and of working would be trifling. Recent facts connected with the origin of typhoid fever from eating shellfish poisoned by sewage in tidal waters give an emphasis to this question and accentuate its importance.

Colchester.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

AN ILLUSTRATION OF THE VALUE OF RECTAL FEEDING IN A CASE OF CARCINOMA OF THE STOMACH.

BY HENRY WRIGHT, M.R.C.S. ENG., L.R.C.P. EDIN., L.M.,
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IN June, 1894, a man aged sixty-five years, who was accustomed to good living and led an active life, had an attack of influenza, followed by erysipelas of the scalp. These naturally enfeebled him very much, and as soon as he was able to get about again I sent him away for change of air. On his return I saw him, and he told me he had been suffering a great deal from dyspepsia, and it was plainly to be seen he was losing flesh very fast. I tried all I knew to relieve the trouble, but nothing did him any good, and, lastly, in November, I became convinced that he was suffering from carcinoma of the stomach, a diagnosis that was confirmed by Dr. F. J. Smith, who saw him in consultation with me on Nov. 15th, and who expressed the opinion that, judging from the severity of the symptoms and the extreme degree of emaciation, he would not probably live till Christmas. It soon became obvious that feeding by the mouth would be sufficient to maintain life but for a short time, since, beyond a little brandy, he only took one teaspoonful of peptonised milk every four hours, from Dec. 10th until his death, and very often could not even take that, or, if he did, could not retain it, on account of persistent vomiting. I then had to resort to rectal feeding, and used at first some of the ordinary nutrient suppositories, but they caused irritation of the rectum and the fæces were very foul-smelling. I then obtained some suppositories of "Mosqueras' peptonised beef-meal." One of these suppositories, containing sixty grains of peptonised beef meal, was administered three times a day from Nov. 27th, 1894, until the patient's death on April 30th, 1895, a period of over five months. The irritation of the rectum subsided and the fæces did not smell nearly so badly. Dr. Smith saw him again on Jan. 17th, 1895, and expressed his surprise at what the feeding had done for him, and said he thought they would keep him alive for some time longer. There can be no doubt whatever that they afforded an "immediate available supply of nourishment," for his pulse, which ranged from 90 to 105, was considerably improved in less than half an hour after the administration of a suppository. Unlike artificial fluid peptones, nutrient enemata, and other forms of suppositories, they did not cause any local or reflex irritation—in fact, they were not only tolerated, but the patient frequently expressed his appreciation of their support, or, to use his own words, said, "I can feel those things feed me." His motions were regular and natural, and he was never troubled with diarrhœa. That his life was prolonged for at least three months, with practically no inconvenience to himself or others, there can be but little doubt, and further experience in other cases has confirmed my opinion that in them we have a very valuable and reliable adjunct to rectal alimentation.

Gainsborough.

NOTE ON "HEAVY BRAINS."

BY J. A. CAMPBELL, M.D. GLASG., F.R.S. EDIN.,
MEDICAL SUPERINTENDENT OF THE CUMBERLAND AND WESTMORLAND COUNTIES ASYLUM, CARLISLE.

I READ Dr. Middlemass's paper on a case of unusual weight of brain in THE LANCET of June 8th and particularly noted the quotations of recorded heavy brains. It may be of interest to put on record the experience of Garland's Asylum. A post-mortem examination has been made in the case of each death (except two) which occurred here since Jan. 1st, 1867. The total deaths during that time have been 1148 and the necropsies 1146. A record of each examination has of course been kept, and the weights of the viscera recorded in a uniform and systematic manner. I have looked over the brain weights and in the following table show certain facts concerning the instances in which the brain weighed sixty ounces or above that weight.

No.	Date of necropsy.	Sex.	Age.	Mental condition.	Weight of brain in ounces.
1	Jan. 8th, 1867	M.	33	Epileptic mania	62½
2	Dec. 26th, 1867	M.	28	Epileptic mania	62½
3	Nov. 4th, 1869	M.	44	Mania	60
4	May 22nd, 1871	M.	24	Epileptic dementia	71½
5	Nov. 3rd, 1873	M.	38	General paralysis	60½
6	April 17th, 1876	M.	61	Mania	60½
7	Sept. 23rd, 1876	M.	39	Mania	62
8	Dec. 16th, 1881	M.	38	Epileptic dementia	60½
9	Feb. 20th, 1883	M.	20	Dementia	60
10	March 18th, 1883	M.	71	Mania	65
11	Oct. 5th, 1883	M.	41	Dementia	62
12	April 9th, 1885	F.	65	Melancholia	62½
13	Jan. 28th, 1887	M.	55	Mania	63½
14	Dec. 18th, 1891	M.	37	Epileptic dementia	62½
15	July 15th, 1893	M.	36	Mania	61

I think that in the case of No. 4 the weight of the brain is so great that I give the measurements of the skull which were noted. The skull without the scalp measured $8\frac{1}{8}$ in. antero-posteriorly, 8 in. diagonally, and 6 in. in width, and across the frontal bone at the junction with the parietal $4\frac{3}{16}$ in. The following are points of interest: a third of the whole brains above sixty ounces were those of patients who had suffered from epilepsy, and though one at present hears so much of the increase of stature and general development of the female, yet only one female brain figures in the heavy list, though I have, and have had, females of gigantic proportions both as to length and breadth and of truly appalling weights. I may say that the population of Cumberland and Westmorland is recognised as one of big stature, and the brains should be proportionately large. I should, however, like to see some statement as to the Aberdeen size and weight of brain. It is said that Aberdonians take an exceptionally large size of hat. I merely give my experience of weight; I do not touch on the other topics, such as mental power and its relation to the size of the brain.

Garland's Asylum, Carlisle.

WESTERMARK'S OPERATION FOR UTERINE PROLAPSE.

BY OTTO HOLST, L.R.C.P. LOND., M.R.C.S. ENG.

I VENTURE to call the attention of the British medical profession to a new operative treatment of this affection devised by a Swedish surgeon, Dr. F. Westermark. In order to show the efficacy of his operation he takes the very worst

cases—cases which have resisted other treatment, even the operative treatment now in common use—i.e., anterior or posterior colporrhaphy, or excision of the cervix. Of such cases he has treated twenty-two with good and *permanent* results, requiring no subsequent employment of any pessary whatsoever. His method of operation is as follows: The patient being under the influence of an anæsthetic and in the lithotomy position, any hypertrophy or ulceration of the cervical lips is cut away, first the anterior and then the posterior. The bleeding is stopped with deep sutures, which are left long for subsequent use. The wounds in the lateral fornices, caused by the excision, remain open for the time being. Should a cystocele be present an elliptical piece of the vaginal wall (not only the mucous membrane), extending from the anterior lip of the portio vaginalis to within one centimetre from the urethral opening, is dissected up, and the wound closed by deep and superficial sutures. If now, by means of the long sutures left in the cervix, the prolapsed uterus be drawn to the right side, the left lateral attachment of the vagina to the paracervical and paravaginal connective tissue becomes well marked. An incision is then made along the anterior fold thus made apparent, beginning from the anterior end of the wound left open in the cervix, and extending straight down the side of the vagina to within about three centimetres of the vaginal opening; parallel with this, and from one to one and a half centimetres behind, another incision is made from the posterior end of the cervical wound. These incisions meet below at an acute angle. The intervening piece of the vaginal wall is dissected up, so that the subjacent connective tissue lies exposed. The bleeding is stopped and deep sutures are inserted, but not tied. The uterus is now drawn over to the left side and the same performance repeated; the womb is then pushed up and the sutures on either side are tied. If the perineum be imperfect, a perineorrhaphy, according to the principles laid down by Tait, is performed. The novelty in this method of treatment lies in the operation of colporraphy being *lateral*. Dr. Westermark's reason for this modification of operating is that it is the strong connective tissue in the broad ligaments which keeps the vagina *in situ* even when the perineum is imperfect, and not the connective tissue found between it and the bladder anteriorly, and the rectum posteriorly. That this view is correct is shown by the fact that prolapse of the anterior and posterior vaginal walls occurs without corresponding prolapse of the bladder or rectum, as the case may be. This is no doubt due to the loose and lax condition of the connective tissue found in these situations. He compares the relation between the uterus and the vagina to a funnel hanging down the neck of a bottle, and contends that, the uterine ligaments—i.e., the upper part of the broad ligaments, the round ligaments, and the sacro-uterine ligaments—being too feeble to keep the uterus in position, it is the lower part of the broad ligaments and their strong connective tissue which keep it *in situ*.

Eastbourne.

AN UNUSUAL FORM OF STRANGULATED HERNIA.

By DONALD F. SHEARER, M.B. OXON., F.R.C.S. ENG.

THE patient who forms the subject of this communication was a weakly woman sixty-two years of age, who had worn a truss for a right inguinal hernia for several years. On two previous occasions she had been under my care for apparent strangulation, which I was able to reduce after the application of an ice-bag. On this third occasion, when I saw her at 11 A.M., the hernia was as large as a goose's egg, quite dull, and very tender. She stated that it came down about 2 A.M., and that she had been unable to get it back, although she had kept ice on it since 6 A.M. I found it was not possible to reduce it, and left it under an ice bag till 6 P.M., when, with the assistance of Mr. Sidney Turner, she was put under chloroform, and a further unsuccessful attempt made to reduce the rupture. I then cut down on the sac, and found that it was full of clear fluid, with a knuckle or two of gut protruding through the internal ring into a dilated canal of Nuck. The gut, which was dark red and congested, was easily returned when the pressure of the fluid was removed without incising the neck of the sac. The cause of the strangulation was then obvious. The internal ring had, by repeated descent of the hernia, been invaginated into a distended sac to the extent of nearly an inch, causing a circular depression around and above it, into which the prolapsed intestine had been forced, and subsequently compressed and strangulated by the increasing fluid. The sac was removed, and the neck ligatured as high as possible. The patient recovered satisfactorily.

Norwood, S.E.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum propriis collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. THOMAS'S HOSPITAL.

CARCINOMA OF THE URETHRA AND BLADDER; REMOVAL OF THE GROWTH, WITH CLOSURE OF THE RESULTING SUBPUBIC WOUND, AND ESTABLISHMENT OF PERMANENT SUPRA-PUBIC DRAINAGE.

(Under the care of Mr. W. H. BATTLE.)

PRIMARY carcinoma of the peri-urethral tissues in the female is a rare disease, and little has been written about it. There are many monographs on urethral caruncle, but few on other new growths of this part. The contrast between the symptoms produced by the growth in this case and the distress caused by the much less dangerous urethral caruncle is very marked. In the former there was merely pain when the bladder became over-distended in consequence of the mechanical obstruction caused by the growth; in the latter the symptoms are very severe and occasion great distress, resembling very often those produced by stone, and are not infrequently increased by a cystitis. We have only found one case recorded of similar disease in which the same method of operation was carried out. Dr J. H Dunn[1] had a patient under his care for recurring malignant disease which involved the bladder, vagina, external genitals, and inguinal glands. He operated in two stages: firstly, he removed the inguinal glands and performed the first stage of a cystotomy, the bladder being opened on the fifth day; he then removed the growth and sutured the bladder wall in front to that behind. The treatment of the resulting wound in the bladder differed from that adopted in the following case. The condition of the patient was satisfactory five months after the operation. 'By using a catheter four to five times in twenty-four hours she was comfortable and in perfect control of the urine, and never soiled by overflow day or night." The account of this case is from the notes of Mr. Wheeler, dresser.

The patient, a widow aged sixty years, who had had children, was sent to Mr. Battle in the out-patient department by Mr. Sydney Fairland on March 20th, 1894. She was a stout, red-faced, emotional woman, who complained of pain, the result of being unable to pass urine. She had had attacks of retention of urine on and off for from three to four months for which she had to seek medical advice. There had not been much pain, excepting when the bladder became distended, then the pain was very severe. A catheter had frequently been required to give relief. She had not noticed any vaginal discharge or unusual swelling, had not lost flesh, and her general health was good. The family history was indefinite. She had not suffered from any serious illness. As the woman was suffering from retention of urine and was in considerable pain she was sent up to the ward at once and relief was afforded by catheterism. The urethra was the site of a new growth, which was evidently the cause of the obstruction. Further examination next day showed this growth to be very hard, rounded, and nodular, completely surrounding the urethra along its whole length and reaching up to the bladder. The finger could be just passed beyond the limits of the growth, which was movable over, but in close relation with, the rami of the pubes on each side. No ulceration could be detected, and there was no area of softening, the mass being of uniform firm consistence. There was no bleeding when the catheter was passed. There was no abnormal enlargement of

[1] Annals of Surgery, 1894, vol. i., p. 461.

lymphatic glands to be detected. The urine, withdrawn with a catheter, was thick, with a deposit of muco-pus, and showed about a third albumen; there was no blood. The abdomen was well covered with fat and had thick walls. The patient appeared to be quite healthy, excepting for the growth and its effects. Until the operation it was always necessary to draw off the urine with a catheter, the patient becoming much distressed at times from the retention, and quite unable to pass urine without assistance. On March 22nd she was placed under the influence of ether and a supra-pubic cystotomy was performed. The bladder was washed out and then injected with a small quantity of boracic acid solution. No rectal bag was used. After incision of the bladder wall the sides of the incision were sutured to the edges of the skin wound on each side. A large drainage-tube was placed in the bladder, and the upper part of the wound was brought together with silk sutures. The patient was then placed in the lithotomy position and the growth fully exposed by the use of Sims's speculum and retractors. An incision was made on each side from before backwards; the one on the right side extended to the bone; these were joined in front by a curved incision following the arch of the pubes in front of the clitoris; the whole of the mass beneath the pubic arch, including the attachments of the clitoris, was now rapidly dissected back, the bone being bared. The upper limits of the growth were more accurately defined, and it was removed with the scissors by cutting through the bladder beyond it. The invasion of the bladder by the growth had extended further along the anterior than along the posterior wall, and as the section had gone through the edge of the growth in front, an additional inch or more of the anterior wall required removal, leaving an opening through which three fingers could be passed. The bladder was in a condition of subacute catarrh. After the arrest of hæmorrhage, which was comparatively slight in amount, the posterior wall of the bladder was drawn forward and attached to the anterior edge of the wound by means of wire sutures. There was some tension on the stitches towards the right side of the wound, but the bladder was completely closed by the sutures, which brought the edges well together. Iodoform was used to the wounds, iodoform gauze was applied to the supra-pubic wound around the drainage-tube, and plugs of the same gauze were placed in the vagina. Two days after the operation she developed bronchitis, and the temperature rose to 103° F. at night. She was delirious, abusive, excited, and tried to get out of bed at night. It was difficult to manage the supra-pubic tube, as she tried to pull it out and interfered with the flow of urine through it. Possibly in consequence of obstruction to the flow thus caused some leakage took place from the subpubic wound. There was no sloughing. On the 30th the wire stitches were removed. The wound had closed very well, excepting to the right of the middle line close to the pubic ramus, where there was a small sinus surrounded by indurated tissue. Syringing with boracic acid lotion was carried out daily. She was still very noisy at night, but quieter during the day; the temperature had been generally above 103° in the evenings of the days which had intervened since the 24th, but the condition of the chest was improving. By April 3rd the temperature had become normal and the previous condition of excitement was followed by a period of depression, with low temperatures. The bronchitis cleared up, and the subpubic sinus diminished in size after the application of solid nitrate of silver. It had not closed entirely when she left hospital on May 23rd, but was not larger than a crow's quill at the surface, and the leakage was very slight when she walked about, but she refused to have anything done to close it. There was no evidence of glandular infection. She was in good health bodily and mentally, and apparently quite able to manage the apparatus (Buckston Browne's), which answered its purpose admirably. Microscopical examination of the growth showed it to be a carcinoma without cell nests.

Remarks by Mr. BATTLE.—I have been called upon to treat several cases of malignant disease (chiefly epithelioma) of this region during the past few years, in some of which the urethra had become involved in extension of the growth. In the removal of these growths it proved possible to do the operation without impairing the action of the sphincter. The question as to what would be the best course to pursue should it be necessary to remove the whole of the urethra had necessarily presented itself. In the excision of growths of malignant character from this part of the body it is advisable to make a free removal, otherwise the disease will speedily recur. It was probable, therefore, that a case might apply for relief in which removal of the growth would result in a condition of permanent incontinence of urine. Some months before this case came under care I had considered the question of the treatment which it would be advisable to follow, and had decided to act in the way described. Had the bladder been much inflamed I should have done the supra-pubic operation some days before proceeding to excise the growth, for I had some fear lest an unhealthy mucous membrane with decomposing urine should interfere seriously with the healing of the subpubic wound, and possibly cause a spreading inflammation in the cellular tissue about the bladder. As the cystitis was but slight, I completed the operation at one sitting. Since the patient went out of the hospital I have heard nothing from her; before she left she was far happier than when admitted, and appeared able to manage the apparatus quite satisfactorily. It might, however, be possible to arrange so that the bladder should be emptied at intervals and the necessity for wearing constantly an apparatus, such as that supplied, done away with. The mental condition after the operation was that of an insane person, and it is interesting to note that such a state of mind has most frequently followed operations on the genito-urinary organs. The character of the delirium was not accounted for by the severity of the bronchitis or by any apparent septic condition of or about the wounds. My best thanks are due to Mr. A. R. O. Milton, the house surgeon, for his great care of the patient.

LEEDS GENERAL INFIRMARY.

INTESTINAL ANASTOMOSIS BY THE MURPHY BUTTON FOR RELIEF IN AN ADVANCED CASE OF CANCER OF THE COLON AND STOMACH; NECROPSY; REMARKS.

(Under the care of Dr. A. G. BARRS and Mr. MAYO ROBSON.)

ALTHOUGH in the following case life was probably neither materially lengthened nor shortened by the operation performed, it seems to be desirable to report it as an example of a comparatively new method of treatment in a patient extremely ill and unable to bear a prolonged operation.

A man aged sixty-five years was admitted under the care of Dr. Barrs on March 25th complaining of abdominal pain, vomiting, and constipation, the pain having been present for nine months and the vomiting for a fortnight. During the latter part of his illness he had rapidly lost weight, decreasing from 14 st. to 10 st. 12 lb. On admission the patient looked ill and emaciated and the abdomen was generally distended. He complained of pain in the region of the umbilicus, the pain being increased by food and relieved by the vomiting which shortly followed the taking of anything solid. An ill-defined hardness was felt under the left ribs, though there was no tenderness here or elsewhere in the abdomen. No peristalsis was visible. Though a little flatus was passed, after the rectum had been cleared by enemata no proper action of the bowels occurred. The tongue was coated. Mucous râles and emphysema of the lungs were noted. The urine was normal. Dr. Barrs diagnosed the case as one of intestinal obstruction, probably dependent on growth, and advised operation, the patient being transferred to the surgical wards on March 29th, under the care of Mr. Mayo Robson, who opened the abdomen the same day by a three-inch incision in the middle line below the umbilicus. Exploration showed a large tumour on the left of the spine involving the splenic flexure of the colon and the stomach, and being too extensive for removal even if the patient had been in a condition to bear a prolonged operation, which he was not. The ileum and sigmoid flexure of the colon were therefore brought into the wound, surrounded by an elastic tourniquet, and made to communicate by means of a medium-sized Murphy's button, after which the abdomen was closed. The anastomosis occupied a little under five minutes, the time being noted without the operator knowing this was being done. The parietal wound was united by silkworm gut sutures. No shock followed, and after the ether sickness had passed off there was no further vomiting. The wound pursued an ordinary course and the sutures were removed on the seventh day. Flatus was passed on the second day and the bowels were moved by an enema on the third day. Prepared food, milk, and other light diet were given from the second day onward. There

had been a little cough and expectoration throughout, and on April 2nd the patient complained of his chest. The temperature remained normal and there were no abdominal symptoms, but the hypostatic congestion of the bases of the lungs and purulent expectoration increased in spite of stimulants and propping up in bed, and he quietly succumbed on April 9th, eleven days after the operation. Post-mortem examination showed hypostatic congestion of the lungs and entire absence of peritonitis. A free opening was found between the ileum and sigmoid flexure of the colon. The detached button was found in the cæcum. The connexion between the ileum and colon was quite secure, but easily detachable, as there had been very little inflammatory reaction, and the margins only of the two apertures in the gut were united. The cancerous mass had completely blocked the splenic flexure of the colon and was adherent to the stomach and omentum.

Remarks by Mr. MAYO ROBSON.—The case illustrates, first, the ease and rapidity with which anastomosis by means of Murphy's button can be effected even in the presence of general distension of the intestines; secondly, the slight amount of shock following a short operation on the intestines even in a patient extremely debilitated by disease; and, thirdly, the very slight amount of inflammatory reaction caused by the sloughing out of the button and, therefore, the slender bond of union between the connected loops. In this case the button fell into the bowel on the proximal side of the stricture, and, therefore, the stricture being impassable, it could not have been parted with. Although in an incurable case this was a matter of no importance, in other cases the imprisonment of the button might make a great difference to the patient. I should think that the difficulty might be overcome by making the distal flange of the button slightly larger than the proximal. The button has been so successfully employed by the inventor and by others that it now must form a necessary part of the armamentarium of all surgeons who perform abdominal work; though, like others who have written on the subject, one cannot help feeling the undesirability of leaving large foreign bodies inside the alimentary canal. The great advantage possessed by the button is the rapidity with which it can be employed. Where, however, such haste is not necessary, as in many cases of enterectomy for new growths and other similar procedures, I still prefer the use of the decalcified bone bobbin, which I have hitherto found of so great service.

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL AND DISPENSARY.

OVARIOTOMY FOR MULTILOCULAR CYST; RECOVERY, COMPLICATED BY FEMORAL HERNIA; REMARKS.

(Under the care of Mr. J. B. PIKE.)

THE following case is an example of the rare complication of strangulated femoral hernia after the removal of a large ovarian tumour. For the notes we are indebted to Mr. A. Palmer, house surgeon.

The patient, a feeble edentulous female stating her age to be sixty years, but looking more like seventy, was admitted to the Loughborough and District General Hospital early in June, 1894, for the treatment of a tumour which nearly filled the abdominal cavity. The growth had been very rapid, and it had not attracted her attention until about six months before her admission. Percussion gave dulness anteriorly, extending more to the right side, and resonance in both flanks. The uterus was movable, and fluctuation could be felt in Douglas's pouch. An ovarian cyst with several compartments was diagnosed, and ovariotomy was performed by Mr. Pike on June 10th, with the assistance of Messrs. Eddowes, Corcoran, and Phelps. The tumour having been exposed by an incision extending from near the umbilicus to within about two inches of the pubes, a large anterior cyst was tapped with Wells's trocar, and seven or eight pints of fluid were evacuated. With slight traction a second cyst came through whole, and this was incised and carefully emptied. No adhesions could be felt, but the tumour still did not present itself. Mr. Pike therefore enlarged the opening in the second cyst by tearing with the fingers, and passed his hand into it. He was thus able to break down the remainder, and by squeezing it in the hand to draw it through the opening. This portion was multilocular, containing thick gelatinous matter. No fluid escaped into the abdomen. The pedicle was thin and was ligatured by transfixion with a blunt needle. The cavity having been sponged out, a Keith's tube was inserted and the wound closed with silk sutures. The tube was removed on the third day with some difficulty, a band of lymph having insinuated itself through one of the perforations and requiring to be snipped through with scissors. The patient suffered from severe shock, but rallied quickly, the wound healing by first intention and the temperature scarcely rising above 100° F. On the 27th the patient was attacked by bilious vomiting, with severe symptoms of shock, almost amounting to collapse, which caused considerable anxiety as to the lymph bands which might possibly exist in the pelvis. This was found to be due, however, to a small femoral hernia, which had not descended as long as the tumour was *in situ*. The hernia was reduced by taxis, and since then the progress of the case has been satisfactory.

Remarks by Mr. PIKE.—This case appears to be of interest on account of the feeble condition of the patient and the very misleading complication during convalescence. I attribute the success of the operation to strict asepticism; to only one person's hand entering the abdomen, that one hand having been frequently cleansed with perchloride of mercury solution during the operation; and to the care bestowed upon the case by our house surgeon and nurses.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Special General Meeting.—Further Observations on the Development of Mammary Functions by the Skin of Lying-in Women.—Intra-peritoneal Rupture of Bladder successfully treated by Suture.

A SPECIAL general meeting of this society was held on June 11th, Mr. HUTCHINSON, President, being in the chair, for the purpose of electing a treasurer in the room of the late Surgeon-General J. A. Bostock, C.B. The Council nominated Mr. J. Warrington Haward for the office, and he was duly elected.

The last ordinary meeting of the society for the present session was then held.

Dr. CHAMPNEYS and Mr. BOWLBY contributed a paper on Further Observations on the Development of Mammary Functions by the Skin of Lying-in Women. Reference was made to the previous paper[1] containing a record of thirty cases, and the description of the lumps there given was quoted. The opinion there expressed was that the lumps were developed from the sebaceous follicles of the skin. Three sets of specimens had since been obtained and subjected to microscopical examination. They were seen to consist of (*a*) a covering of normal skin; (*b*) loose subcutaneous tissue and fat; and (*c*) aggregation of glands. The glands were situated deeply, in the situation of sweat glands, and much more deeply than the sebaceous glands, which were seen unaltered. The glands were of the tubular type, the deeper parts much convoluted, the terminal ducts nearly straight and opening through interpapillary processes. The cells of the deeper parts appeared to be columnar; those of the duct were polyhedral, in two or three layers. The glands, in short, were like sweat glands, but extended more deeply, were more irregular both in structure and extent than those in normal skin, and were interpenetrated by plentiful unstriated muscular fibres; they formed the lumps in question. There was no appearance of mammary tissue or any other tissue except that described. They agreed in microscopical appearance with the description of skin glands in the human axilla by Dr. Creighton.[2] The conclusions drawn were (1) that the lumps consisted of modified sweat-glands; and (2) the fact that various mammary secretions were produced by modified sweat glands seemed to show either that mammary tissue was not necessarily a direct modification of sebaceous gland tissue or that similar secretions could be produced by more than one variety of skin

[1] Transactions of the Royal Medical and Chirurgical Society, vol. lxix., p. 419.

[2] Ibid., vol. lxv.

gland. In this connexion it might be remembered that the ceruminous glands of the ear which secreted "wax" were coiled-tubular and not acinous in structure.—The PRESIDENT remarked that the axilla was the common seat of a peculiar disease affecting the female—namely, the succession of a series of abscesses. It was probable that these arose in the glandular structures described.—Mr. GODLEE remarked that he had once been surprised at finding this glandular tissue in an axilla which he was examining in connexion with scirrhus.—Dr. MITCHELL BRUCE called attention to the fact that atropine powerfully affected both the mammary and the sudoriferous glands by arresting their secretion, while pilocarpine powerfully stimulated both sets of glands, and also the ceruminous glands of the ear.—The PRESIDENT inquired if Dr. Champneys and Mr. Bowlby had examined the glands of the ornithorhynchus, which animal had no proper mammary glands.—Mr. BOWLBY, in reply, said that they had not examined the glands of the ornithorhynchus, though Dr. Creighton in his paper had pointed out their analogy to those of the dog and of the human axilla. The difference between the glands described and those of normal skin was one of size and not of structure. The gland elements became hypertrophied together with the adjacent fat, and these formed the lumps found in pregnant women.—Dr. CHAMPNEYS, in reply, said that he had seen these lumps acquire the size of a hen's egg in the axilla.

Mr. WALSHAM related a case of Intra-peritoneal Rupture of the Bladder in which Suture was followed by Recovery. He also made remarks on the inflation test. He said that in 1888 he read before the society a case of intra-peritoneal rupture of the bladder successfully treated by suture, supplementing the paper with a table of 11 cases, all he could find published, of that injury treated in like manner. He now related a second successful case, and Mr. Miles, late house surgeon to the Metropolitan Hospital, had collected 17 additional cases in which suture was employed, making altogether 28 published cases of intra-peritoneal rupture of the bladder treated by suture. The patient, aged forty-two, was admitted into the Metropolitan Hospital on March 8th, 1895, with an intra-peritoneal rupture of the bladder. The diagnosis was established by inflating the bladder with a few cubic inches of air forced in by two or three compressions of the rubber ball of an ether-freezing microtome. The abdomen at once became tympanitic and the liver dulness effaced. The rent was closed by fourteen silk Lembert sutures, the pelvic cavity irrigated with perchloride of mercury and boracic lotion, and the abdominal wound sewn up after the bladder had been proved competent by injection with milk. An uninterrupted recovery took place. The value of the inflation and injection tests for ruptured bladder was discussed. The present appeared to be the first case in which the inflation test had been actually put into practice. The conclusions drawn from a single experience were: (1) that the amount of air to be introduced need only be very small, not more than three or four cubic inches; (2) that only very moderate pressure was required for the inflation; (3) that the presence of quite a small amount of free gas in the abdominal cavity was sufficient to establish the diagnosis beyond a doubt; and (4) that the introduction of gas into the abdominal cavity, even in small quantity, was attended by a profound disturbance in the patient's general condition. The disturbance which followed in this case at once passed off on opening the abdomen and allowing the free air to escape. It was suggested, therefore, that the test in future should not be applied till the patient was on the operating table, so that should the collapse threaten life the abdomen could be opened at once. In the after-treatment of the case it was contended that a catheter should not be left in the bladder: firstly, because it was not necessary; and secondly, because of the risk of cystitis and septic infection. Of the 28 cases included in the two tables 11 recovered and 17 died. In the 11 that recovered, in only 1 was peritonitis present at the time of operation; whilst conversely in the 17 that died in 8, and probably in 9, peritonitis had already set in. The cause of death in the 8 cases in which there was no peritonitis at the time of operation was in 5 shock or hæmorrhage, or the two combined, and in 3 peritonitis, the peritonitis in 2 out of the 3 being due to leakage of the rent or giving way of a suture. In no less than 4 out of the 28 cases was the bladder found at the post-mortem examination to leak. The importance of testing the competency of the bladder by injecting milk or other bland and easily detectable fluid could not therefore be too strongly urged.—The PRESIDENT congratulated Mr. Walsham on the ingenious expedients he had resorted to in order to make the diagnosis certain. The success of these operations evidently depended upon attention to small details, and one of these details was the use of a proper needle. He himself had closely watched many interesting cases of rupture of the bladder which illustrated the tolerance of the peritoneum in some cases to considerable urinary extravasation. He had never sutured a ruptured bladder, as his experience of them lay in the days before this was a recognised procedure.—Mr. BARKER asked why it was that the injection of three or four cubic inches of air into the abdominal cavity produced these very serious symptoms. He thought that other factors were probably at work to account for the symptoms of collapse. The structures within the abdomen were constantly subjected to varying degrees of pressure without producing constitutional reaction, and he did not think that in the case related it was proved that the symptoms followed from the entrance of air alone. If a large volume of soda water were taken into the stomach no such sudden symptoms followed, and in other cases, accompanied by the escape of gas into the peritoneum, no such shock was produced. He thought that after suture some fluid other than milk should be used to test the soundness of the suturing, for milk might be anything but an innocuous fluid. In one case he operated upon a hydronephrosis and made an aseptic fistula in the loin. He was anxious to discover whether fluid passed down the ureter on this side into the bladder, and so he allowed some milk to trickle from the loin sinus down the ureter into the bladder. It set up a most violent cystitis and inflammation of the pelvis of the kidney.—Mr. WALLIS said that the man was not collapsed at first, the history was erratic, and the symptoms indefinite. When water was injected into the bladder it returned forcibly with only a small amount of blood, and he thought that the slight diminution in volume might be due to inaccuracy in measurement. The air test was most striking, and gave rise to absolute symptoms at once, such as would be likely to be produced by a very sudden alteration of abdominal tension. He thought from this experience it would be better to inject the air after an anæsthetic had been administered. He had seen milk injected over and over again into the bladder in cases of vesico-vaginal fistula without producing any distressing symptoms.—Mr. SHEILD remarked that the diagnosis was always the difficulty in these cases, and the facility in diagnosis appeared to be in direct proportion to the size of the rent. In one case which he saw while house surgeon at Addenbrooke's Hospital the history and the symptoms of ruptured bladder were quite clear, but yet when large quantities of water were injected the bladder formed a distinct rounded tumour. Furthermore, the fluid injected was all returned per urethram and was blood-stained. In that case no operation was done and the patient got quite well. Some of these cases were probably instances of partial rupture, and others were small rents which on distension of the bladder were closed by pouching of the mucous membrane. Injection of air was a good method of diagnosis, and had been adopted by Senn for suspected intestinal ulceration and for perforation of the intestine from bullets. Senn had used hydrogen gas, which might not be so irritating as air, for no mention was made of collapse. He asked if the sutures penetrated the vesical wall through the mucous membrane; if so, calculi might form.—Mr. BOWLBY said that he had seen calculi which had been formed on the sutures employed in a case of supra-pubic lithotomy. He thought that the escape of air into the peritoneal cavity would, as a rule, cause such symptoms as had been described. A very small quantity of air would cause disappearance of liver dulness, and such disappearance of dulness had been observed a few minutes after perforation in typhoid fever.—Mr. WALSHAM, in reply, said that the object of the paper had been to discuss the inflation test. He thought that the symptoms described were due to the entrance of air, for the signs of shock passed off directly the peritoneum was opened. He had never seen any harm follow the use of milk injected into the bladder. It appeared that the injection of air would be of chief value where the rent was small. He did not pass the sutures into the vesical cavity. The peculiar grating sound produced when the catheter was passed through the rent in the vesical wall into the recto-vesical space was very marked, and he did not think that he had laid sufficient stress on it from a diagnostic point of view.

OBSTETRICAL SOCIETY OF LONDON.

The Development and Normal Structure of the Human Placenta.—Exhibition of Specimens.

A MEETING of this society was held on June 5th, Dr. F. H. CHAMPNEYS, President, being in the chair.

Dr. EDEN read a paper on the Development and Normal Structure of the Human Placenta, which was a short abstract of a communication about to be published in the *Journal of Pathology*. He said the placenta consisted of two series of structures: one developed from the ovum—the fœtal placenta; the other developed from the uterus—the maternal placenta. The fœtal placenta was developed from the external fœtal envelope or chorion. At the end of the second week the chorion was covered with villi, the reflexa had closed over the ovum, and the tips of the villi were loosely embedded in it. The fœtal and maternal vessels were thus brought into close relation, and the general arrangement represented a simple type of diffused placenta. The development of the discoidal placenta merely consisted in the specialisation of a part of the chorion. The placental chorion consisted of three sets of structures: (1) a covering of epithelium, (2) a connective tissue stroma, and (3) bloodvessels. The chorionic epithelium consisted of two layers; the superficial layer or trophoblast represented the fœtal epiblast and was the more important of the two. By a process of proliferation buds were formed from the trophoblast, which developed into new villi, and the steps of the process were described. The stroma consisted of a delicate reticulum of branching connective tissue corpuscles with numerous leucocytes. The meshes of the stroma formed a system of lymphatic channels which were in communication with the capillaries. The vessels of the villi were very large and numerous, and ran for the most part immediately beneath the epithelium; this was an arrangement favourable to osmosis. The lymphatic system of the stroma could be artificially injected from the capillaries. In uninjected placentæ blood was often found in the stroma, so that the villi appeared to be soaked with blood like a sponge. The maternal placenta was developed from the uterine mucosa. The earliest changes were a continuation of those found in menstruation, for the fertilised ovum was engrafted on the mucosa in its active phase. The development of the decidua consisted of three stages. In the first stage extensive hæmorrhages occurred in the decidua, and decidual cells were formed in large numbers from the connective tissue corpuscles. These changes were preparatory, and could be found in all parts of the decidua during the first month. In the second stage the chorionic villi invaded the serotina, and the maternal vessels were opened up, thus establishing a circulation through the intervillous spaces. The invasion of the serotina appeared to be the result of the great activity of the trophoblast layer, and the steps of the process were described. The decidual cells also showed great activity in the absorption of blood effused into the serotina. Large lacunæ were formed by the opening up of neighbouring vascular and glandular channels. The changes characteristic of this stage were found at the growing margin of the placenta up to the last weeks of gestation. The third stage represented the adult stage of the serotina. All active processes had then ceased, and the serotina had undergone some amount of consolidation and repair. The course of the maternal vessels through the serotina and their openings into the inter-villous spaces were described in detail. The inter-villous spaces were, according to Dr. Eden, made up (1) of the space existing primarily between the decidua and the chorion; (2) of spaces formed by destruction of decidual tissue; and (3) of glandular and vascular channels opened up in the same way. The circulation through the inter-villous spaces was not rapid, the outflow being chiefly promoted by the intermittent contractions of the uterus. The giant cells so often described in the serotina were really embedded trophoblastic buds. The fœtal and maternal structures of the placenta were firmly bound together by the attachment of numerous villi to the serotina; the changes occurring at the site of attachment were described. Owing to this firm union, separation of the placenta during labour occurred, not between the fœtal and maternal layers, but through the loose cavernous layer of the serotina. The paper was illustrated by a large number of lantern slides (photo-micrographs), in which the processes described by Dr. Eden were depicted.

Mr. ALBAN DORAN showed a lantern slide (photo-micrograph) of a Section of Placental Polypus. He proposed to deal with the subject of placental polypi and their relation to malignant disease in a paper.

The following specimens were shown:—

Dr. W. DUNCAN: (1) Large Gangrenous Myoma removed by Hysterectomy; (2) Early Embryo in Amnionic Sac which had been retained in utero eight months; (3) Tubal Mole Pregnancy removed by Abdominal Section; and (4) (for Mr. G. H. JONES) Double Monster (Thoracopagus).

Dr. PLAYFAIR: (1) Ovum in a Sarcomatous Uterus which had been extirpated per vaginam; and (2) Sarcoma of Uterus extirpated per vaginam.

Mr. R. O'CALLAGHAN: Myoma of Uterus removed by Hysterectomy.

Dr. LEWERS: Six Specimens of Cancer of the Cervix Uteri removed by Supra-vaginal Amputation, in which eight years, seven years, five years, five years, three years, and two years respectively had elapsed without recurrence.

Dr. ADDINSELL: Deformed Fœtus.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

Exhibition of Cases and Specimens—Cobra Venom.—Tuberculous Pleurisy.

THE twelfth meeting of this society was held on June 5th, Dr. CLOUSTON, President, being in the chair.

Mr. SHAW MACLAREN showed a Right Kidney removed for Malignant Disease. The tumour was too large to remove between the ilium and ribs, and so it was removed by an anterior incision from the ribs to the groin, with a second incision backwards into the lumbar region. The patient only survived three days, though there was entire absence of shock. There was no peritonitis or suppression of urine. The tumour was a malignant adenoma.—Mr. MacLaren also showed a photograph and microscopic specimen from a case of Malignant Adenoma of the Scalp.

Dr. LEITH showed: (1) the Skeleton from a case of Double Congenital Dislocation of the Hip-joint combined with Rickety Curvatures in the Vertebral Column and Tibiæ; (2) three conditions of Hydronephrosis, in the first of which there was stricture of the urethra; the second showed enormous dilatation of the bladder, marked left hydronephrosis, and hypertrophy of the right kidney; there was no obstruction in the urinary passages; the patient suffered from diabetes mellitus.

Dr. ELDER showed a specimen of a Brain with Hæmorrhage into Broca's Convolution and the part between Broca's Convolution and the Internal Capsule. The part of Broca's convolution affected was the posterior half. The symptoms during life were almost those of bulbar paralysis. There was paralysis of the lower part of the face on the right side, the muscles of the lips, tongue, throat, and those involved in deglutition. The vocal cords were not involved. There was no real motor aphasia.

Dr. ALLAN JAMIESON showed a case of Psoriasis with Peculiar Crateriform Arrangement of the Scales.

Dr. NORMAN WALKER exhibited a case of Eczema and a case of Lupus Erythematosus in an early stage.

Professor FRASER showed Rabbits under the Influence of Cobra Venom. He remarked that he had been struck with the statement, which seemed to be a fact, that snake charmers seemed to be immune to the bites of the most poisonous snakes, and that snakes were immune to the venom of other poisonous snakes. Since 1889 he had been collecting the venom of serpents from India, Africa, Australia, and other parts, especially cobra venom. The experimental work formerly brought forward had been unsatisfactory, though it tended to show that a certain amount of immunity might be produced. In his own experiments he had found it very difficult to immunise animals, more difficult than in the case of diphtheria, for the death-producing qualities of the venom were much greater than that of diphtheria toxine; the minimum quantity killed within a few hours, while in the case of diphtheria it was a matter of several days. He found considerable difficulty, but after a time he succeeded in rendering the animals immune. He had begun by injecting small doses, one-tenth of the minimum lethal dose of the venom at short intervals of two to three days. In about twenty days the dose had been increased to half the minimum lethal

dose; the dosage was gradually increased till, at the end of five months, fifty times the minimum lethal dose could be administered. Two rabbits which had received fifty times the minimum lethal dose were shown. They were in good health and had increased in weight. One animal had received enough cobra venom to kill 320 rabbits of its own weight. Observations with the blood serum of animals immunised to thirty times the minimum lethal dose had been made. He showed a rabbit which had received twice the minimum lethal dose. Thirty minutes afterwards, when toxic symptoms had developed, the antitoxin serum was injected, and the animal almost at once began to recover, and complete recovery took place. In most cases of death in man the fatal issue occurred at a longer period than three hours after the bite, so that probably the individual had not received much more than the minimum lethal dose, and thus the conditions were very favourable to the use of an antidote.

Dr. ALEXANDER JAMES read a paper on Tuberculous Pleurisy. He dwelt on the well-known connexion between pleurisy and tuberculous affections of the lungs, and pointed out how often pleurisy preceded tuberculous phthisis. He described the case of a patient who had been admitted to the infirmary for pleurisy which had lasted two and a half months. There was no tuberculous history in the family. The illness had began acutely with shivering and pain in the side. Pleurisy with effusion was developed, with breathlessness. As fluid remained in the chest, two and a half months after the commencement of the attack he was sent to the infirmary. The temperature on admission was fluctuating. After some weeks the chest was tapped, 130 oz. being removed by repeated tappings. No improvement took place. He began to complain of pain in the opposite side. Pleurisy was discovered and effusion rapidly took place. Both sides were tapped repeatedly to relieve dyspnœa. As his condition in the next three months deteriorated the left side was opened and drained, but the patient sank and died. Post mortem the pleura was found very much thickened on both sides; miliary tuberculous nodules were numerous in the lung and pleura; other organs showed tuberculous nodules. Such cases, he remarked, were not uncommon. There had been right-sided pleurisy of a chronic character, followed after some months by pleurisy on the left side, the miliary tuberculous process commencing in the pleural membrane while in a low state of vitality, and spreading to the lungs and other organs. There was no evidence of the tuberculous process having begun in the lung. Cases of pleurisy with a similar course might be met with, but then there was no evidence of tubercle. Thus a man aged forty-seven was admitted to his ward complaining of pleurisy. The family and personal history was good. He had been ill for one and a half months. Effusion was present on the right side, and this was followed by pleurisy and effusion on the left side. Tapping was repeatedly performed, but no improvement took place. He developed catarrhal pneumonia and died, his entire illness having lasted six months. No evidence of tubercle was found post mortem. In these chronic cases no ordinary treatment did good. He advocated the trial of free incision, as it held out the best prospects of a cure. A second plan of treatment might be to aspirate part of the fluid and inject the chest with an aseptic fluid which would increase the absorption from the pleura. Drainage held out the best prospects.—Dr. Affleck, Dr. Philip, Dr. Leith and Mr. Giles took part in the discussion which followed.

Mr. WALLACE'S paper on Some Notes on Hæmaturin Tumours of the Bladder and the Treatment of Enlarged Prostate was taken as read.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF OBSTETRICS.

Imperforate Anus necessitating Colotomy.—Exhibition of Specimens.

A MEETING of this section was held on May 10th, Dr. R. D. PUREFOY, the President, being in the chair.

Dr. KIDD described the case of an infant three days old whose bowels had not acted since birth, although it had passed urine. An endeavour was then made to introduce a small soap suppository, but this failed. On examination it was found that the abdomen was distended and that the anus was normal for a distance of about half an inch, but that even a fine probe could not be passed any further. Unavailing attempts were then made to reach the cul-de-sac of the bowel from the anus. There did not exist any chord-like structure that might serve as a guide to the bowel, nor when separating the tissues (although, as was seen by the specimen, the top of the little finger was within about one-sixteenth of an inch of the cul-de-sac) was there ever felt any impulse when the child cried, nor was there any indication from the sense of touch that the cul-de-sac of the intestine was so near. The tissues were divided with a fine tenotome and scissors for some distance backwards from the anus towards the tip of the coccyx, afterwards exploring as carefully as possible with the tip of the little finger. There is very little room between the rami of the ischia in a new-born infant when a finger, even the smallest, is in the anus. The advice given by most authorities to keep close to the anterior surface of the coccyx was followed. A spring wire nasal speculum of small size was used in the hope of getting a view of the tissues which were being dissected, but no success was obtained. Amussat has recommended the removal of the coccyx as a step of the operation, it allows so much more room. On looking at the specimens now exhibited this is quite evident, and it is a matter of regret that recourse was not had to this procedure. Failing to reach the bowel, the wound was well powdered with boracic acid and dressed with a little iodoform gauze and gauze tissue. On the following day another attempt was made to reach the rectum from the anus, but with no more success than the first. No cutting was done with the knife where the part could not be reached with the finger tip. All endeavours being futile, left inguinal colotomy was performed, but the child only survived six days, dying when it was ten days old. The colotomy relieved it, but death ensued from exhaustion. At the necropsy there was no evidence of any peritonitis. A frozen section of the parts was exhibited, the points of interest in which are: (1) the extreme beauty of the specimen, showing so clearly as it did the exact relation of all the parts—notably, the height to which the empty bladder extends above the level of the uterus; (2) the absence of any chord-like structure that would act as a guide to the termination of the rectal cul-de-sac; (3) the very small amount of oozing from the anal wound after two attempts had been made to reach the bowel; (4) absence of any evidence of peritonitis after death; (5) although the tip of the little finger could be got within one-sixteenth of an inch of the rectal cul-de-sac there was no evidence from bulging or from any impulse conveyed by the child crying that the bowel was so close; and (6) considering the distance of the bowel from the anus, could the rectum have been successfully freed and drawn down so as to stitch it to the anus?—Dr. GLENN said the Academy were very grateful for the opportunity of inspecting the frozen section. In two cases which he had seen operated on in the Rotunda one had recovered, but in the other the rectum could not be found. He would remove the coccyx if he had a case similar to Dr. Kidd's, and he would prefer a Littre's operation to a loin operation, the advantage of a Littre's operation being that after the bowel was opened it was possible to wait till the child got stronger, and then, by passing down a bougie, it could be cut on through the anus. If the rectum was brought down and stitched to the anus there was great trouble in keeping it dilated afterwards.—Dr. SMITH, when assistant master at the Rotunda, had operated on a case and had succeeded in opening into the rectum. He stitched the rectum to the anus. The child only lived a few days. Except when there was only a simple membrane between the rectum and anus he had not seen any cases operated on which had recovered.

Dr. ALFRED SMITH showed an Ovarian Cystoma removed from a married woman aged twenty-nine years. The diagnosis caused considerable difficulty. In September, 1894, the patient had a severe pain in her right side in the neighbourhood of the umbilicus, and shortly afterwards felt a tumour in this region. She stated that it underwent great alterations in size. The sudden diminution was followed by an increased quantity of urine. Examination revealed a tumour the size of a small fœtal head, freely movable in every direction, capable of being easily pushed up under the ribs, and distinctly reniform, the hilum being well marked. Drawing down the uterus to the full extent and pushing up the tumour under the ribs did not stretch the pedicle so as to convey impulse. Operation revealed a multilocular ovarian

tumour having an extremely long pedicle and a shape distinctly like that of a kidney. One of the cysts was perforated by a well defined punched-out hole, through which the cyst contents escaped into the peritoneal cavity. This hole explained the sudden diminution of the size of the tumour. The recovery was rapid.—Dr. KIDD asked whether any peritonitis was present. According to Dr. Smith's theory the tumour emptied itself through the opening into the peritoneum. The fluid in most multilocular cysts was irritating to the peritoneum.—Dr. SMYLY said the tumour had a close similarity to one caused by hydronephrosis, both in its shape and in its becoming larger at times. Referring to the escape of the fluid he said that, if the cyst was an ordinary proliferous glandular cyst, it would contain pseudo-mucin, which is not easily absorbed by the peritoneum, and which would, therefore, have been found in the peritoneum. On the other hand, if it was a papillomatous cyst the prognosis was very bad.—Dr. SMITH, replying, said there was no evidence of peritonitis except that there was a fair amount of ascites present. He hoped that it was not a papillomatous cyst.

Dr. GLENN exhibited a Uterus removed by Vaginal Hysterectomy for Epithelioma of the cavity.—Dr. SMYLY thought that in cases of cancer of the body not involving the cervix removal by ligature was the best method, as the uterus had not then to be opened. The uterus might, however, be too large to remove entire.

SECTION OF PATHOLOGY.

Chronic Articular Rheumatism.—Fracture of the Fibula.—Exhibition of Specimens.

A meeting of this section was held on May 17th, the PRESIDENT being in the chair.

Dr. BENNETT read a paper upon the Limitation of Chronic Articular Rheumatism. Referring to the extraordinary polish shown by the pisiform bone in one of the specimens, he said that where there was the least range of movement there was always the greatest amount of polish.

Dr. E. H. BENNETT gave the details of three cases of Fracture of the Fibula, with Dislocation of the Ankle-joint, which had united with great deformity; he had, however, been able in great measure to rectify this by extension and manipulation. The cases had been left unreduced for periods respectively of a month, six weeks, and, lastly, three months. He pointed out the error of regarding Pott's fracture as the commonest injury of the fibula found associated with dislocation of the ankle. He showed by the series of fractures collected in the museum of Trinity College and by his own clinical experience that the oblique fracture of the external malleolus, caused by traction acting through the external lateral ligament, is of much more frequent occurrence than the classical Pott's fracture.

Mr. H. GRAY CROLY and Mr. GRAVES showed an Aneurysm of the Abdominal Aorta which had commenced posterior to the cœliac axis. The sac had become firmly adherent to the lumbar vertebræ, and had also firm adhesions with the left side of the diaphragm and the left psoas muscle. There had been no symptoms of aneurysm during life, no pulsation, and no pain in the back, although the anterior surfaces of the first dorsal and first and second lumbar vertebræ were eroded, pain in the region of the left kidney alone being complained of. The kidney was displaced downwards by the aneurysm. Death took place suddenly from rupture through the diaphragm into the left thorax.—Dr. MCWEENEY wished to know how an aneurysm situated behind the cœliac axis ruptured into the left pleural cavity. A short time ago he saw a case in which an aneurysm situated in the middle of the dorsal region of the aorta had ruptured into the substance of the lung and not into the pleural cavity.—Dr. GRAVES, in reply, said that the aneurysm had become glued to the psoas muscle, and had eroded it and pushed it up, and that it had then burst through the diaphragm.

Dr. J. O'CARROLL exhibited the Brain and Spinal Cord of a case of Syringomyelia.—Dr. MCWEENEY said the case was absolutely unique in his experience. The only part that he had as yet been able to make sections of was in the cervical region. The section was stained by Pal's method. The central canal was lined by the usual columnar epithelial cells. At each lateral aspect there was a cleft or aperture through which the central canal communicated with two wing-shaped cavities which extended back to the exit of the posterior nerve roots. There were then two things which had occurred. One was dilatation of the pre-existing central canal, and the second a channeling out of the grey matter on each side of the cord. There was no evidence of neuroglia either of new formation or of embryonic origin. The cavity in the grey matter was bounded by inspissated grey matter. The dilatation of the cavities of the central nervous system must have been forming many years before the spinal cord symptoms appeared. Then it suddenly opened out the grey matter on each side of the cord, forming there two large cleft-like cavities, extending through its whole length. In the cervical region there was a small aperture between the central canal and the canal in the grey matter. This aperture gradually widened out, so that in the dorsal region there was no division between the two canals. The sclerosis was chiefly situated in the white matter of the posterior columns.

SECTION OF SURGERY.

Injuries involving the Articulations of the Metacarpal Bone of the Thumb.

A meeting of this section was held on May 24th, the President, Mr. W. THORNLEY STOKER, being in the chair.

Dr. E. H. BENNETT, speaking on the subject of Dislocation of the Metacarpal Phalanx of the Thumb forwards, exhibited photographs of a recent specimen of unreduced dislocation, and casts of several others, the histories of which prove that this dislocation frequently remains irreducible, even while still recent—a fact the cause of which was as yet not ascertained. He next projected on the screen with the lantern representations of the lateral dislocation of the metacarpo-phalangeal articulation outwards, published by Bessel Hagen, which is the only example of this lesion recorded. He then exhibited photographs of a lateral dislocation of the joint inward, taken from the cast of the limb previously to dissection. This is the first record of an internal dislocation of the joint. In this hand the metacarpal bone of the thumb was at its base completely dislocated backward, presenting a deformity which Dr. Bennett contrasted with the deformity produced by fracture of the base of the metacarpal bone of the thumb, of which he exhibited a large number of photographs, in proof of his assertion that this fracture is a very common injury.—The PRESIDENT said the paper was exhaustive, and, to a very great extent, original.—Mr. MYLES had only met with one case of Hey's dislocation in the living. After some trouble he had reduced it by exaggerating the deformity, the patient being under chloroform. He did not comprehend how the sesamoid bones got between the head of the metacarpal and the base of the phalanx, with their articular surfaces turned towards the latter.—Mr. HEUSTON said that five months after the occurrence of a compound dislocation of the carpo-metacarpal joint of the thumb, when the dislocation was still present, he dissected down on the articulation, from the internal aspect, and found that the sesamoid bones had got between the two parts. He dissected them out, and was then able to reduce the dislocation. He did not see which way the articular surfaces of the sesamoid bones were turned.

THE Conversazione of the Society of Arts is fixed to take place at the South Kensington Museum on Wednesday, June 19th. The reception will be held by Major-General Sir John Donnelly, K.C.B., Chairman, and the members of the council of the Society; and promenade concerts, a glee and madrigal concert, and a vocal and instrumental concert will be given at intervals during the evening.

GORDON'S NATIONAL MEMORIAL.—The annual general meeting in connexion with the Gordon Boys' Home was held on Monday last at the Mansion House, under the presidency of Sir Reginald Hanson. The annual report showed that the number of boys in the Home during the year ending March 31st last was 340. It had been necessary to send some of those admitted away, while a few wild arabs had absconded. Of the remainder some had enlisted in the army and navy, others had been found situations in civil occupations, and three had been helped to emigrate. The total expenditure for the year had exceeded the income by £4429, £2013 of which deficiency had been made good from the donations received during the year. A most deserving charity, instituted in appropriate honour of one of our most popular, and deservedly popular, national heroes, should not be thus left to depend on its capital for its current expenses.

Reviews and Notices of Books.

Traitement des Fractures par le Massage et la Mobilisation. Par le Dr. LUCAS-CHAMPIONNIÈRE, Chirurgien de l'Hôpital Beaujon. Paris: Rueff et Cie. Pp 564. 1895.

OF recent years many departments of surgery have advanced with enormous strides, but in the treatment of fractures of bones very little progress has been made. Long ago it was laid down as a rule admitting of practically no exceptions that absolute immobility was the essential element in the treatment of fractures, and the changes made were chiefly attempts to attain to the perfection of immobility. But of late years there have been a few who have urged that the harmful results of complete immobilisation of a fractured limb more than counterbalance the advantages claimed for it, and the work before us is the fullest account hitherto published of the treatment of fractures with the minimum of fixation. Dr. Championnière tells us that in 1867 he saw a case of unrecognised fracture of the radius which had united without any impairment of the function of the limb, the patient having used the hand from the time of the accident. This case induced him to attempt the treatment without fixation of all fractures of the radius which came under his observation. Later in 1874 he applied the same principles to fractures involving joints, but it was not until 1884 that his treatment assumed its present form.

The book commences with a historical introduction, and a chapter is devoted to proving that the results of fixation are far from being all that could be desired; thus, although fixation may relieve the pain at the time, yet the pain felt on attempting to use the limb subsequently is often very great, and, though six weeks after a fracture of the leg a patient may be able to get about on it, yet it is much later before he can use it as freely as he could before the accident. The author then proceeds to lay down the principles which should, in his opinion, govern the treatment of fractures. He urges that some degree of mobility at the seat of fracture is essential for the formation of sufficient callus, and that massage, judiciously applied, assists the consolidation of the bone and preserves the suppleness of the joints, muscles, and tendons in the neighbourhood of the fracture. The author lays great stress on the painlessness of the process of massage over the seat of fracture, and even claims that the pain which has previously been present is relieved. He then describes four ways in which massage may be applied. In the first the massage is commenced immediately after the accident and regularly continued. The cases suitable for this are those fractures which are not liable to displacement, as fractures of the radius and the fibula; it is also to be used in fractures near joints, as in fractures of the neck of the humerus and certain fractures of the condyles of the femur. In the second class of cases immediate massage is employed, followed by the application of a splint. This may be used for the fractures already mentioned when the tendency to displacement is great, and also for fractures just above the malleoli. By the third method an immobilising apparatus is applied, and removed at the end of two or three days, when massage is performed and the splint is reapplied, this procedure being repeated every day. This can only be done for fractures where the displacement has a medium tendency to recur, as in the leg and the arm, especially the forearm. In the last class of cases complete immobilisation is employed, and after the commencement of consolidation, massage is used. This applies to cases where the mobility of the fragments is very great; by the fixation at first a mass of callus rapidly forms, sufficient to allow the splint to be withdrawn for the purpose of performing massage, and the splint may or may not be replaced after the massage, according to the mobility of the fragments. In this class are included fractures of the upper end of the humerus and of the lower end of the same bone. Dr. Championnière acknowledges that there are certain fractures for which massage cannot be employed, and for some others massage is possible, but dimcult. The contraindications for massage are two in number—firstly, when the mobility of the fragments is very great and threatens to lead to permanent and marked deformity (though in some of these it may be usefully employed when partial consolidation has occurred), and, secondly, when the fracture is compound and the wound is in a situation to interfere with the massage. It is advised that each application of massage should be at least a quarter of an hour in duration, but that half an hour is better, except just at first.

Many chapters are devoted to the consideration of the various fractures in detail, and those forms of massage are described which are applicable to each. Numerous explanatory illustrations are given of the manipulations to be employed. As to the results the author claims that the full function of the limb is obtained as soon as the bone is firm enough to be used. The method advocated in this volume deserves at least a careful trial at the hands of the surgeons of this country; and though its application may prove to be somewhat more restricted than its inventor claims, yet probably its employment in some cases will lead to results not to be obtained by the methods hitherto in use.

A Manual of Gynæcological Practice for Students and Practitioners. By Dr. A. DÜHRSSEN, *Privat-docent* in Midwifery and Gynæcology in the University of Berlin. Translated and edited from the fourth German edition by J. W. TAYLOR, F.R.C.S. Eng., and FREDERICK EDGE, M.D. Lond. With 120 Illustrations. London: H. K. Lewis. 1895.

THE translators have done good service by rendering Dr. Dührssen's excellent little text-book available for the general English reader. Much of it is, as they say, coloured by the individuality of modern German thought and method. We agree with them that this is rather an advantage than not, and that it gives a freshness to subjects which are otherwise somewhat well-worn. The translators have added footnotes at various parts of the work where the author's views seemed to them to require amplification or qualification. Among the special features of the book may be noticed the description of Dührssen's vaginal operation for fixation of the uterus. In this operation, by which it is claimed that retroflexion may be completely and permanently cured without any danger, the peritoneal cavity is opened between the bladder and the uterus, and the body of the uterus is sutured to the anterior vaginal wall. Another operation evidently in favour with the author is vaginal cœliotomy; the vesico-uterine pouch of the peritoneum is opened, not Douglas's pouch, as would perhaps have been more generally expected. Although it is claimed that after the operation there is no more disturbance than after a curetting, the sphere of the operation would seem to be a very limited one. There are two points in regard to pessaries which seem to us of general interest. First, as regards the treatment of retroflexion by pessaries, the author is of opinion that a permanent cure may be obtained in varying periods of time; that is to say, that the uterus will then remain in its normal position without a pessary. The second point concerns the treatment of prolapse by pessaries. Dr. Dührssen considers that a true prolapse can only be cured by operative means and not by pessaries. Although these may keep the prolapse up, it is only by stretching the vagina, so that in the end they make matters worse. He concludes, therefore, that the use of pessaries in the treatment of prolapse is to be rejected as

wrong in principle. We do not think that in cases of prolapse where the vaginal portion comes outside the vulva it is quite correct to say, as is stated in the text, that the fundus uteri retains its normal elevation; nor, on the other hand, do we agree with the footnote made by the translators on this point, in which they say that in most of the cases in question the sound will not pass beyond the usual distance. Generally the sound in such cases passes four or five inches. We see that the translators consider that the liquid extract of viburnum prunifolium is of all drugs supposed to have any influence on chronic oöphoritis, the most reliable. The translators recommend for obtaining and keeping up anæsthesia a mixture of two parts of ether with one of chloroform, given with Clover's inhaler without using an air-bag. There is an excellent section on the disinfection of instruments and appliances, and, indeed, the whole work will amply repay perusal by all interested in the subjects of which it treats.

Manual of Practical Morbid Anatomy. By H. D. ROLLESTON, M.A., M.D., F.R.C.P., Fellow of St. John's College, Cambridge, Assistant Physician and Lecturer on Pathology at St. George's Hospital, and A. A. KANTHACK, M.D., M.R.C.P., Lecturer on Pathology at St. Bartholomew's Hospital. Cambridge: University Press. 1894.

THIS small and beautifully printed volume is one of the biological series of the Cambridge natural science manuals, and is intended to serve as a handbook for the post-mortem room, and it does so most completely. Its objects are two: (1) to indicate the incisions and the most convenient way of examining the organs of the body, and (2) to point out the morbid changes to be looked for, thus making it a valuable manual of morbid anatomy, and not a mere post-mortem guide. A systematic method of examination has been described paragraph by paragraph, and, in special cases, modifications are also introduced. The normal appearances of organs, the common variations, and the effects of post-mortem change are carefully pointed out. But besides the ordinary methods of a post-mortem examination, in confirmation or otherwise, of the diagnosis of the physician or surgeon, the higher pathological uses of the necropsy are carefully kept in the foreground of the work. Details of preparations for further microscopical and bacteriological observations are most carefully given, and in the introduction directions are also added for the temporary or permanent preservation of specimens of morbid anatomy. These are taken almost literally from a letter of Mr. E. W. Willett, curator of the Museum of St. Bartholomew's Hospital, published in THE LANCET of Nov. 25th, 1893. The first chapter in the work is devoted to general matters, and the signs of death, rigor mortis, hypostatic congestion, the examination of the skin, the peculiarities of a medico-legal examination, the nature and direction of wounds, and the points to be specially noted in a necropsy on a newly-born infant are briefly but clearly described. The other chapters deal successively with the preliminary examination of the abdomen, the examination of the thorax, the detailed examination of the abdominal viscera, the examination of the kidneys and pelvic viscera, the head (including the brain, eye, ear, and nose), the spine and spinal cord, the joints and bones, and lastly the female breasts. One point of detail in which we differ from the authors is with regard to the removal of the small and large intestines during the preliminary examination of the abdomen before the thorax is opened. We should certainly leave them *in situ* until we had completed the examination of the thorax, and examine them in anatomical order with the other abdominal viscera. Again, we should not cut across the duodenum but the commencement of the jejunum, and should always apply a double ligature and cut the gut between, for no one can ever be sure at this stage that the preservation of the contents of the stomach and duodenum may not be required for further examination. These, however, are points of but minor importance, and we would add that in our opinion it should be a compulsory part of every student's medical education for him to have made some post-mortem examinations under the supervision of a teacher. If these were carried out in the thorough and orderly manner laid down in this handbook this experience would be of the utmost service to him in his after career, whether as a practitioner or teacher.

LIBRARY TABLE.

Comfort in the Home. By M. J. LOFTIE. Leadenhall Press. 1895.—The progress of medical science is universally allowed to be tending more towards the prevention of diseases than to the curing of them when once they are established. Some sage once said it was worry, and not work, that killed; and in the unpretending little book before us we find various plain directions for the prevention of worries in the home—not, indeed, the worries which arise from babies or "incompatibility of temper," but matters like lamps, fires, and dust-bins. Nothing is more annoying than a lamp which smokes, and how few servants know how to "do" a lamp properly. If they will look at Mrs. M. J. Loftie's plain rules they will find out. We rather disagree with the author's direction, "Blow lamps out, don't turn them down." In certain forms of cheap lamp to blow down the chimney means death; and in those of better construction the flame should be turned low and then blown out by a sharp puff *across* the chimney-top. This, however, is the only flaw we have been able to find in a really admirable little work.

Dental Microscopy. By A. HOPEWELL SMITH. Pp. 119. With Eight Lithograph Plates from the author's original drawings. London: The Dental Manufacturing Company, 6 to 10, Lexington-street. Philadelphia: The S. S. White Dental Manufacturing Company, Chesnut-street.—This is an excellent little volume. The present standard works on histology give hardly sufficient data with regard to the preparation of good specimens of the dental tissues, but this want will be no longer felt, for Mr. Hopewell Smith's book contains all the information that can possibly be needed. The subject matter is divided into eight chapters, the first of which deals with the necessary apparatus required; the second, third, and fourth with the preparation of the hard and soft tissues; the fifth, sixth, and seventh with imbedding, staining, and injecting; and the last with photo-micrography. Preceding the subject matter are eight lithographed plates illustrative of dental histology. These are worthy of much praise, the drawings being very fine and conveying a truthful impression of the actual appearance of specimens when viewed through the microscope. Altogether this book will form a correct and concise guide to those who work, or intend to work, in the much-neglected field of dental microscopy.

Report of the Devonshire Hospital and Buxton Bath Charity. — This report, which includes the period from May 1st, 1894, to April 30th, 1895, shows that during the year 2610 in-patients have been under treatment in the institution. This number is fewer by 141 than was recorded at the last subscribers' meeting. More than the whole of this lessened number applies exclusively to the first three months of the present year, as the number under treatment during 1894 was 97 in advance of the year preceding, and this smaller number was therefore due to the exceptional severity of the weather during the period. The results of the residence and treatment were not less satisfactory than usual. Of the 2610 patients under treatment 2279 were discharged as "improved," 109 as "no better," 7 by "own request," 5 were found to be "unfit cases" for the hospital, 2 were "infested with vermin," two were "transferred" to be out-patients, one

was found to be "mentally affected," one was discharged for "breach of rules," four "died" during their stay in the hospital, six left "without report," and 194 remained "on the books" on April 30th. The four deaths serve to impress the fact that many of the cases are of seriously urgent character, and also to demonstrate the nature of the work of the hospital. By means of a postcard, given to every patient on leaving the hospital, and returned after an interval of six weeks, more than two-thirds are stated to have been benefited, and seven of these to have died within this short period after discharge. It may be noticed that no fewer than 454 of the cases of rheumatic character were found to be complicated with morbid conditions of the heart, and that 2279 of the cases were of a rheumatic or gouty nature.

Analytical Records
FROM
THE LANCET LABORATORY.

BINIODIDE OF MERCURY AND OTHER SOAPS.

(EDWARD COOK AND CO., SOAP WORKS, BOW.)

AMONGST the number of excellent medicated as well as toilet soaps manufactured by this firm the antiseptic soap made with the periodide of mercury stands first in point of interest to the profession. The powerfully antiseptic action of mercuric iodide (HgI_2) is well known, and has been made use of with very good results in parasitic and other diseases, and the convenience of being able to employ it in the comparatively harmless form of soap is obvious. This is done by first dissolving mercuric iodide in potassic iodide, forming a double salt, which is none the less antiseptically powerful than the pure metallic iodide, while with soap it is perfectly compatible and quite stable. Excellent results are recorded of its application in skin diseases, eczema, ringworm, &c. The biniodide soap is prepared in two forms—the first for ordinary usage, and the second (a well-dried soap) for toilet purposes. From its composition it should be a very effectual antiseptic agent, and of peculiar service where antiseptic treatment is indicated. We have examined also two specimens of carbolated soaps—one intended for ordinary purposes and the other of a superior kind and adapted for the toilet. Lastly, the specimen of pure toilet soap, known as "super-fatted Riviera soap," leaves little to be desired in regard to its composition, since it contains a minimum of moisture (5 per cent. only) and gives no indication of free alkali; on the contrary, it contains (as its name implies) a slight excess of fats. It is, therefore, free from those qualities present in carelessly-made soaps which are injurious to delicate skins.

RECENT TABLOIDS.

(BURROUGHS, WELLCOME, & Co., SNOW-HILL-BUILDINGS, E.C.)

"Residuum Rubrum Tabloids" consist practically, as our examination by the spectroscope of an acidulated and alcoholic solution shows, of the hæmatin of bullock's blood, which is, of course, a natural organic iron compound, and therefore one which is likely to be readily appropriated. "Thymus Gland Tabloids" are obviously convenient for use in all lymphatic conditions, and, as recent experience has shown, in some forms of pernicious anæmia and leucocythæmia. "Dried Sulphate of Iron Tabloids" are supplied for the treatment of anæmia, the iron being more permanent in this form than in many other salts. On the assumption that "zymines" or the pancreatic ferments when taken by the mouth are digested and destroyed by the gastric fluids, tabloids coated with keratin containing these ferments are prepared. Their passage unimpaired into the duodenum and intestinal tract is thus ensured. A powerful antiseptic and germicidal compound is represented in zinc permanganate, which in tabloid form may be readily used for the preparation of a solution for injection, as in gleet, or for gargling the throat. One of the most satisfactory features of the tabloid (omitting the specially coated tabloids) is the surprising and ready way in which it first swells up when placed in water and then collapses into fine powder, so that the employment of the drug in the best possible physical form is inevitable.

VARIOUS TEAS GROWN AT HIGH LEVELS.

We have recently received a number of samples of tea forwarded by Mr. Feltwell of Tolcarne, Chiswick, which are said to illustrate that the greater the elevation at which the tea plant is grown the smaller is the amount of astringent matter developed in the leaf, although it is further stated that at the same time no practical depreciation in regard to the refreshing qualities and alkaloidal constituents of the plant takes place. These teas are said to differ, therefore, in the important respect that they contain much less tannin than the bulk of teas which, on the contrary, are grown comparatively quickly under the influence of the greater warmth of lower elevations. So far as regards the character and taste of the infusions yielded by these high grown teas we found distinct evidence that to some extent this is the case; there is a marked absence of roughness on the palate, the taste is smooth and delicate, whilst it lacks little of the peculiar aromatic character of ordinary teas of excellent quality. Some analyses we made lend further support to this view, since in the accompanying table it will readily be seen that the five minutes' infusion of the high-grown teas—using the same amount of tea in every case—contains a goodly proportion of caffeine (nearly as much, in fact, as in the powerful variety of tea placed side by side in the table), but a notably less proportion of

COMPOSITION IN GRAINS OF HALF A PINT OF CLEAR TEA IN WHICH ONE TEASPOONFUL OF LEAF (40 GRAINS) HAD BEEN USED.

TABLE I.—*Five Minutes' Infusion.*

Constituents.	Pekoe.	Pekoe Souchong.*	Broken Pekoe.*	Broken Souchong.	Pekoe Souchong.	Indian tea (Assam).
Extract	11·50	11·30	13·60	14·00	12·00	14·40
Mineral matter ...	1·30	1·40	1·30	1·90	1·70	1·80
Tannin	1·90	2·00	2·66	3·33	2·65	4·00
Caffeine	1·00	0·80	0·92	0·95	1·21	1·50

* These samples had been submitted to a drying process.

TABLE II.—*Thirty Minutes' Infusion.*

Constituents.	Pekoe.	Pekoe Souchong.*	Broken Pekoe.*	Broken Pekoe.	Pekoe Souchong.
Extract	16·66	16·00	17·33	18·23	17·82
Mineral matter	1·83	1·66	1·76	2·33	1·66
Tannin	3·10	3·17	3·33	3·73	3·17
Caffeine	1·36	1·34	1·40	1·64	1·64

* These samples had been submitted to a drying process.

tannin. Even a thirty minutes' infusion of the high-grown teas (Table II.) is found to contain less tannin than a five minutes' infusion only of strong Indian or low-grown tea. We have obtained evidence also which shows that there is a distinct increase in the amount of those essential oils which largely determine the agreeable character of tea. There would appear to be, therefore, a distinct dietetic advantage

gained by cultivating the plant on high elevations, where it grows slowly and where it never attains anything like the height and proportion of the plant grown on lower, warmer, and probably moister levels. Thus, to take one example, at Darjeeling, 7000 feet above sea level, the yield is said to be but 200 to 300 lb. per acre, while on the plains of Assam, where the level is only 100 to 500 feet above the sea, it averages from 800 to 1200 lb. per acre. The former teas, however, are moderate in price, and there is considerable interest attaching to the fact, we think, that we have been able to confirm by our own analyses and examination the important dietetic advantage claimed for them, which is that while they do not lack the refreshing qualities of tea as regards flavour and substance, yet they are destitute of that harshness which in powerful teas is ascribed to a preponderance of astringent substances.

STOUT.

(WHITBREAD & CO., LIMITED, 277, GRAY'S-INN-ROAD, E.C.)

This is a moderately priced and genuine malt liquor, containing 6·43 per cent. of absolute alcohol by weight and 8·01 per cent. by volume; malt extractives, 7·46 per cent.; nitrogenous matters, 0·75 per cent.; and mineral matter, 0·29 per cent. It is free from undue acidity, and, as the above analysis shows, contains to a satisfactory degree those additional nourishing properties which beer, when made with burnt malt, is well known to possess. Its flavour is ripe but mellow.

PREPARED SOUPS.

(LONDON AGENCY: A. CHADWICK, 7, CARLTON-STREET, REGENT-STREET, S.W.)

A very satisfactory feature of these preparations is that, in spite of being "tinned," they yield a highly nourishing liquor which possesses all the characteristics of fresh soup. Two kinds were submitted to us, respectively called "turtle for invalids" and "beche-de-mer soup," the latter being made from the fresh teat fish, which has afforded a source of food much prized by the mandarins and wealthy Chinese for centuries. The soups were quite free from objectionable preservatives, and we could trace no injurious metals. They are excellent and satisfactory substitutes when the material cannot be easily or freshly procured.

New Inventions.

SOUTHALL'S NEW SANITARY TOWEL.

THE sanitary towel of this firm, as originally devised, has been a great convenience to women of all classes as a cleanly and economical method of dealing with catamenial troubles. It consisted of a pad of absorbent cotton-wool enclosed in a gauze covering, with a thin layer of non-absorbent cotton-wool as a backing. The contrivance was in every way superior to the ordinary diaper, being more absorbent, comfortable, and cleanly, while it was offered to the public at the cost of the washing of a diaper—viz., one penny. But it was admitted that inconvenience frequently arose in the use of that sanitary towel in consequence of the area of the discharge contracting as the discharges advanced in the pad. The viscous nature of the catamenia was answerable for this failure, which in some cases, where the discharge was copious, led to serious discomfort as well as to injury of the clothes by the arrest of the absorption. The manufacturers are now making the towel in a modified form by which the absorbent qualities are enhanced. A pad is constructed of alternating layers of absorbent cotton-wool and gauze, and it has been found that when the discharge has passed through a thin stratum of absorbent cotton-wool its area, which in its passage through the wool had been gradually contracted, immediately upon coming in contact with the gauze spread laterally and, as it were, made a fresh start of larger area in entering the next layer of cotton-wool, when the process of contracting and spreading was repeated. In this way the tendency in the flow of the discharge to contract its area is counterbalanced, and the inconvenience of imperfect absorption—dammed-up discharge with consequent roughened edges of the pad and perhaps overflow soiling of the clothes—is remedied. The improved "towels," like the original "towels," are, of course, intended to be burnt after use, and are sold at one penny each.

THE "HOLDFAST" ENEMA SYRINGE, WITH ANCHOR END.

WE have received from Messrs. W. H. Bailey and Son, 38, Oxford-street, a specimen of their new enema syringe. There are two points to be noticed about this instrument: first, it is entirely free from metal; and, secondly, the end which is placed in the solution to be injected is fashioned on the principle of the toy known as a sucker, so that it adheres to the basin, and thus the annoyance so common with the older forms of syringe of either having to hold the end under water or of seeing it slip out is entirely done away with.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A MEETING of the committee of the Association of Fellows of the Royal College of Surgeons of England was held at 5.30 P.M. on June 5th, at 101, Harley-street, W. Mr. George Pollock, the President, occupied the chair. The minutes of the last meeting of the committee were read and confirmed. A letter from the Secretary of the College was read stating that the President of the College had appointed Monday, the 10th inst., at 4 P.M., for the reception of the proposed deputation from the Association of Fellows, and asking to be furnished with the names of those constituting the deputation and with the special matters which the deputation intended to bring before the committee of the Council. The committee then took into consideration the points of reform to be pressed upon the committee of the Council appointed to receive deputations from the Fellows of the College by the deputation from the Association and the composition of the deputation.

A letter was read from Dr. Ward Cousins accepting the invitation of the committee to stand at the approaching election as a representative of the views of the Association, and the honorary secretary reported that Mr. C. B. Keetley and Mr. Victor Horsley were unable to come forward as candidates. The selection of Mr. A. T. Norton and Dr. J. Ward Cousins as the candidates of the Association was then unanimously confirmed, it being understood that Mr. Willett's re-election should also be supported.

The committee then proceeded to draw up a circular letter to be issued to the Fellows of the College detailing the concessions already gained for the Fellows by the agency of the Association, and the further alterations in the Charters and by-laws which the Association was endeavouring to secure.

A deputation from the Fellows' Association had a conference with a committee of the Council of the College in the council-room of the College on Monday, June 10th, at 4 P.M. The members of the deputation were Mr. George Pollock (President), Mr. A. T. Norton, Mr. Vincent Bell (Rochester), Mr. Victor Horsley, Mr. Herbert Allingham, and Mr. Percy Dunn (honorary secretary). They were received by the President (Mr. Christopher Heath) and Vice-Presidents (Mr. Reginald Harrison and Mr. Willett), Mr. Howse, Mr. Morris, Mr. Rivington, and Mr. Tweedy. Mr. T. Holmes, Mr. Parnell, and others were prevented from attending the deputation, and Mr. Bryant was unable to appear on the committee. The suggestions for the alterations in the Charters and by-laws, which had been previously submitted to the committee and have appeared in our columns, were formally submitted and explained. A long discussion ensued, and at the termination of it the deputation was asked to furnish the committee with a *précis* of their reasons for urging the various proposed changes. This the deputation undertook to do, and the conference, which lasted for nearly two hours, terminated with a vote of thanks from the deputation for the courtesy with which they had been received and the attention with which they had been listened to by the President and the committee.

THE LANCET.

LONDON: SATURDAY, JUNE 15, 1895.

THE fifty-eighth session of the General Medical Council, lasting nine days, came to an end on Thursday, the 6th inst. The discussion of the Midwives Registration Bill may by many be thought to be superfluous, seeing that the principle of it has received the attention of the Council for nearly twenty years. It would be quite within the truth to say that the Council has for that period unanimously accepted the principle of it. The Act of 1886, though it made little difference to midwives, did raise midwifery to the level of medicine and surgery. But the Act of 1886 did something more: it gave direct representation. And until now it can scarcely be said that a Midwives Bill has been discussed in the light of direct representation. That can no longer be said.

The Council has devoted the best part of three days to the subject and, under the strong pressure of a party much opposed to any such legislation, has reconsidered its many resolutions in favour of it. The result is to reaffirm the conviction that something must be done to remove the scandals of midwives' midwifery; but the Council has taken the utmost pains to minimise this something, so that the contemplated midwife shall be, as in the past, a nurse-midwife, and nothing more; that she shall discharge no medical functions and assume no medical airs or titles; and that if she does assume such functions or titles she shall in so doing expose herself to penalties, including removal from the register. The Council has, moreover, suggested that in regard to the form of certificate to be given—and this only by bodies approved by the Midwives Board—the approval of the Midwives Board and the General Medical Council shall be secured. The Council also desired amendment of the absurd provision in Clause 16, requiring the consent of the Attorney-General to prosecutions under the Act, and the substitution of the consent of the Midwives Board or of the local authority. It will thus be seen that the Council has endeavoured to safeguard the profession. There is a very general agreement that public opinion demands some legislation of the sort which was under discussion. They are no friends of the General Medical Council or of the principle of direct representation who would set the Council and the direct representatives of the profession against such a demand. The bulk of the profession recognise that there is a great section of the community who are too poor to be attended at any fees which a registered medical practitioner can take, and yet cannot be treated as if they were paupers. It is inevitable that they should largely be attended by midwives. The least that law can do is to secure that they shall be in a degree "protected" from a class of women who have absolutely no knowledge and very little character; that a class with a little knowledge and some character shall be placed within their reach, whose training shall be sound, if rudimentary, and who shall at least be taught to understand that they are to act only in normal cases and in subordination to medical men. These are the views which the General Medical Council has affirmed again for the fourth or fifth time. Fortunately the Council enjoys now in a large degree the confidence of the profession. It has in the matter of the certificates of the Obstetrical Society shown its determination to protect the medical profession, as in the recent debate it has shown its anxiety to "protect lying-in women from the incompetent." It is not likely to revert to this subject again for many years. It would scarcely be justified in doing so. Henceforth the responsibility for "Gamps" must rest with the Government and with Parliament. Those who are opposed to any legislation will have to make their influence felt without the help of the Council. It may well restrain them to know that by resisting this modest demand they are preparing the way for an inferior race of quasi-medical practitioners, be they trained nurses of three years' standing or unqualified assistants in the form of man-midwives, whose pretensions will be a far more serious competition to medical practitioners than anything contemplated in the Midwives Bill.

It is an illustration of the serious demand on the Council's time made by such matters as the Midwives Registration Bill and lengthy penal cases that when the time came for a formal discussion of the Final Examinations, based on the reports of the Inspector and Visitor and of the Examination Committee, the subject had to be referred to next session. The only consolation is that the General Medical Council in this way keeps some control over the lines of legislation. It would be very unsatisfactory if such Bills as a Midwives Bill could be passed without the amendments suggested by the Council. Another illustration of the importance of the advising functions of the Council is to be found in its action in regard to the recognition of foreign diplomas. The Government of the Netherlands asked for leave to practise in the United Kingdom for its subjects holding a Netherlands diploma. The Council, through its Education Committee, pointed out to the Lord President of the Privy Council that while the Netherlands Government insisted on an examination in final subjects from those holding British diplomas wishing to practise in the Netherlands it would be wrong to concede the privilege asked. Such action on the part of the Council is of the first importance; and it is no slight testimony to the moderation and impartiality with which in public questions the Council discharges its duties that it should be consulted by the Privy Council. We have before now had occasion to find the General Medical Council not entirely alert to its best method of procedure, and even not alive to its weighty responsibilities—our readers will not desire the occasions to be more precisely instanced; but on the whole we congratulate the members upon the result of their fifty-eighth session's work.

THERE seem many signs that we are witnessing the decay of hypnotism. The stream of hypnotic literature would appear to be gradually subsiding—not, perhaps, before it was time—and the interest in the subject, both public and professional, is evidently on the decline. The claim of hypnotism to take rank, not as a curious psychological phenomenon, but as a recognised branch of therapeutics, is

now pressed with much less insistence and sincerity than was the case a few years ago; and it would seem that history is once more repeating itself, and that the periodic burst of attention and curiosity evoked by the subject has for the present, as on former occasions, spent its force. To readers of THE LANCET such a course of events will be in no way surprising. While admitting that modern hypnotism presented some new developments and refinements, we have always maintained that in essence it was identical with the mesmerism, Braidism, animal magnetism, and electro-biology of former times, and that in due course it would be found to be barren, if not noxious, in the field of medicine. Students of psychology must always be interested in the curious phenomena of hypnotism, but we feel more than well justified in having resisted the intrusion of hypnotic doctrine and practice into the domain of medical science. The dangers of the proposed new departure were evident and grave, its advantages at best problematical, at worst illusory and deceptive. It may not be amiss to recall some of the salient features of a controversy which, we suspect, is nearing its predestined termination.

A cardinal point, *ab initio*, was, Are hypnotic phenomena normal or abnormal, physiological or pathological? It has been alleged that the phenomena were perfectly normal and natural, and some of the apostles of the movement have even gone so far as to assert that more than ordinary strength and balance of mind were necessary to constitute anyone a thoroughly good subject for hypnotism. It was said that the power of sustained concentration of attention was the most essential point in securing the success of the experiments, and that such a power was the very antithesis of hysteria or morbid neurosis. On the other hand, the more general and gradually prevailing opinion has been that the hypnotic trance and all the curious attendant phenomena were of the nature of disease and showed a mind not abnormally strong or even normally sane, but to a more or less extent temporarily off its balance. This latter view is, in our judgment, most in accord with recorded fact and most consistent with theory. The hypnotic subjects who abounded in Paris and Nancy did not seem to most dispassionate observers to be good examples of sane and vigorous intellect. On the contrary, the atmosphere of morbid introspection, display, and more or less charlatanism seemed to cleave to these practised performers and all their curious evolutions. Ordinary experience of life teaches us that one of the most potent forces in human nature is the love of notoriety and the desire to become the centre of interested attention. *Possunt quia posse videntur* is a principle of very wide application. Granted an atmosphere of excited interest and a strong expectancy of certain results on the part of subjects and operators, and the most astonishing effects can easily be produced. Again, if it is of the essence of hypnotism that the subject should yield his will to that of the operator, and more or less merge his personality in that of another individual, we think such a condition much more likely to be associated with mental weakness than with mental strength. We by no means assert that conscious imposture was usual in these experiments, although we believe it had often a considerable share in the results, and we quite admit that hypnosis is a genuine phenomenon—as genuine, for example, as somnambulism; but we believe it to be essentially morbid, and associated with feebleness of will and unusual impressionability. The most probable theory of its causation has always seemed to us the view that was put forward by HEIDENHAIN and other good physiologists—viz., that the hypnotic trance is the result of an inhibition of some portions of the cerebral substance, the remaining portions acting abnormally and giving an extraordinary response to ordinary stimuli.

The second great controversy had regard to the question, Granting that hypnosis is real and can be evoked according to definite rules, is it capable of being turned to useful account in the field of therapeutics? When we reflect upon the strong claims that were put forward for hypnotism as an anæsthetic, an analgesic, a nerve stimulant, and what not, it must seem not a little surprising that so potent an agent should be allowed to rust in the not overstocked armoury of treatment. We suspect the marvellous results alleged to have been attained have not well withstood the crucial tests of time and wider experience. There was a stage in the annals of this curious history when even grave organic maladies—e.g., hemiplegia, Bell's paralysis, &c.—were alleged to be submissive to hypnotism. We are not sure that even tumours were not alleged to have vanished on the waving of the magic hypnotic wand. But by degrees one claim only was insisted upon—namely, that hypnotism was a potent remedy for "functional" nervous affections. Every experienced physician knows that these maladies constitute the most illusive of all fields for therapeutic experiment. The victim of functional nerve-disorder not infrequently gets well with any treatment or no treatment. Above all is it clear that any strong impression on the nervous system, whether produced accidentally or by deliberate therapeutic endeavour, frequently results in the cure of such cases. That hypnotism is one way of producing such an impression we fully grant, and its beneficial effect might be freely admitted if there was no reason to suspect that the cure might be worse than the disease. To drive out neurasthenia by inducing the hypnotic state is a procedure fraught with so much peril, both on the moral and the physical side, that it can only be undertaken with grave apprehension. The broken-down nervous systems that form the bulk of neurasthenic cases are bad material for doubtful psychical experiments. Rather should we commend in such cases the old and well-tried methods of treatment by rest, change, fresh air, diet, tonics, modification of unwholesome environment, suitable occupation, and recreation. These methods often succeed, and it can at least be said that their failure does not make the last case of the patient worse than the first.

Hypnotism is undoubtedly worthy of study, but we suspect that more and more it will be handed over to the psychologist, perhaps sometimes to the alienist, and that its interest for the practical physician will steadily wane. Until the evidence of its utility is a hundredfold more conclusive than it at present appears we shall not regret having striven to preserve medical science from identification with doctrines and methods which are tainted with charlatanry.

THE review of the position of the Fellows of the Royal College of Surgeons of England in relation to the Council, which formed the substance of our two preceding articles,

must have impressed our readers with the steady progress which has been made during the last ten years by the movement which commenced in 1884 to secure for the Fellows of the College constitutional privileges on a par with those enjoyed by the Fellows of the other professional Colleges in the United Kingdom. Before 1884 the Council of the Royal College of Surgeons reigned supreme and there was no efficient organisation by which its rights could be challenged. Little interest was evinced in the elections to the Council, which were largely in the hands of the metropolitan Fellows, and too often resulted in the return of the typical hospital surgeon favourable to the maintenance of the existing *régime*. A comparatively small number of votes sufficed to secure a seat upon the Council. Consultation with the Fellows and Members of the College was a rare event; the ideas of the responsibility of the Council to the constituency, of an annual meeting, of allowing the Fellows to vote by means of voting papers *in absentia*, and of calling the Fellows and Members together regularly for consultative purposes were scouted by those whose hands held the reins of management.

It was at length perceived by those most interested in the cause of reform both within the Council and outside that it was only by united efforts and efficient organisation any impression could be made upon the *vis inertia* of the Council. As many thought at the time, and as is now sufficiently obvious, the course of litigation upon which certain Members of the College entered with the Council did for a time exercise a prejudicial effect upon the reform movement. These Members pursued a mistaken policy, and, overrating the strength of their position, endeavoured to win by force that which could only be obtained by diplomacy. Many friends were alienated by the extravagance of their demands, but the moment the pressure of these demands was relaxed by the adverse decision in the Chancery Division the wheels of constitutional progress again began to revolve. The Fellows obtained their separate half-yearly meetings, the Fellows and Members obtained their common room, and the Members were benefited by being able to claim to be called together to discuss any subject on which the Fellows had been consulted. The Council became effectually leavened by the introduction of a strong reforming element, and at the present moment there is but a small remnant of the ancient class of councillors still surviving on the Council.

But the very success which has attended the claims of the Fellows constitutes a source of danger. The foundations have been securely laid and the edifice has been erected, but it has not been crowned or rendered proof against adverse elements. Seeing the goodly structure, the Fellows and Members will be apt to imagine that the battle has been successfully fought and that they may lay aside their arms. They forget that all that has been gained for them rests solely upon resolutions of the Council, which might be rescinded or remain a dead letter if apathy is allowed to follow effort and enthusiasm. The great necessity at the present moment is to secure a new Charter conferring upon the Fellows and Members that substantive position which is their due. Statutory meetings must necessarily be more influential than meetings having no official character. Moreover a new Charter should provide for the election of the President in the mode which commends itself best to the opinion of the constituency authoritatively obtained, and for that change in the constitution of the Court of Examiners and in the term of office of its members which would bring the College more into line with kindred institutions. It is undoubtedly an anomaly that the members of the Council of the College should be able to elect themselves to posts of profit and emolument as examiners, and scarcely less anomalous that examiners should be elected for five years and the term be renewable without any interval. The members of the Senate of the University of London are not eligible for examinerships, and not even boards of guardians can elect their members to lucrative offices. At the College this anomaly has prevailed from its origin and has been an immense hindrance to the cause of reform. At first the examiners entirely controlled the Council, for all were elected from the Council. Now it is true a certain proportion of the court are, though not necessarily, elected from outside the Council.

The foregoing remarks will show that the work of reform at the College, although it has advanced steadily in the last few years, is still incomplete even in relation to the Fellows of the College. The Fellows should not neglect the opportunity afforded by five vacancies to return candidates prepared to comply with the reasonable requirements of the constituency and to make the College a model of good government, instead of presenting features which would never be sanctioned by the State in the case of any new institution. In another column will be found the names of the intending candidates for the forthcoming election. Many of these are more or less identified with the liberal movement, and some have taken an active part in carrying on the work of collegiate reform. We propose to discuss their respective claims to fill the vacant seats in an early issue.

Annotations.

"Ne quid nimis."

THE METROPOLITAN HOSPITAL SUNDAY FUND.

THIS is the last opportunity we shall have of urging upon our readers the claims of the Metropolitan Hospital Sunday Fund for 1895. Before our next issue the appeal to the public of London will have been made from every pulpit, and to a certain extent the material result of that appeal will have become apparent. It is not our intention to state, or rather to re-state, the grounds upon which we base our belief that contributions to the Metropolitan Hospital Sunday Fund fulfil in every conceivable direction the demands of well-directed charity. From year to year and for many a year we have given the reasons for our unvarying advocacy of the Fund, and by our distribution annually of special supplements setting forth the needs of the hospitals of London have aided to the best of our ability the efforts of the executive. We note that this year our example in this direction has been followed by an institutional journal whose imitation we welcome as a proof of the utility of our many previous issues. We do not intend now even to recapitulate our numerous pronouncements on the Fund, but we may be permitted, at a time when the columns of the lay press have been so repeatedly and pointedly open to

the distressful appeals of more than one of our best known metropolitan institutions, to urge upon our readers the extreme need of support in which the objects of the Fund stand. London, the richest city in the world, is content to allow the institutions which provide for her sick to struggle on from day to day begging and ever begging. The aggregate results of these incessant appeals to charity, let it be conceded, are noble. But it must be remembered that poverty is a cause of sickness, and as it is true that an enormous proportion of the patients at the hospitals can directly or indirectly trace their plight to the exiguity of their circumstances, so it is true that our hospitals, if kept at a perpetually low dead level of poverty, may tend to become inadequate to the stress put upon them. How can they look forward to doing better? How can they plan improvements, inaugurate reforms, classify schemes for placing their affairs upon a sounder financial basis, and tabulate arrangements for more competent organisation against the inroads of sickness in the community, if the time of all concerned in the management is for ever occupied in despairing endeavours to make both ends meet? We have deliberately preferred on this occasion not to set out the manifold claims of the Fund on the attention of our readers—they are summarised in the lucid and eloquent letter from the Lord Mayor which we received as we were going to press—and confine ourselves to saying: To-morrow is Hospital Sunday, give according to your power.

THE SECRETARY OF STATE, THE SOCIETY OF MEMBERS, AND THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

SOME misconception seems to have arisen in certain quarters concerning the attitude of the Secretary of State towards the Council of the College in reference to the recent application of the Council for approval of alterations in some of the by-laws of the College. These by-laws were Section 4, relating to the election and admission of Members of the Council; Section 16, relating to misconduct of Fellows and Members; and Section 25, relating to dental surgery. The amendment of Section 4 was for the purpose of simplifying the mode of distribution and collection of voting papers in accordance with the wishes of many Fellows of the College, and the amendment of Section 25 was for the purpose of increasing the fee for the certificate to practise as a dentist from ten guineas to twenty guineas over and above any stamp duty. The amendment of Section 16, relating to misconduct of Fellows and Members, was, we believe, required because the terms of the existing by-law were not sufficiently precise to enable the Council always to remove from the lists of Fellows and Members members of the profession included in the list who had been judged by the General Medical Council to be guilty of infamous conduct in a professional respect, and it has happened more than once that the Council of the College has not been able to deprive of his diploma a Member or Fellow of the College whose name had been erased from the Medical Register. This anomaly the Council, we understand, wished to rectify, and they proposed a formula for the purpose which received the sanction of the annual general meeting of Fellows and Members and the half-yearly meeting of Fellows in January. As soon as the formulæ had passed the Council and had been submitted to the Secretary of State, the Society of Members of the College took steps to oppose the proposed changes. The Society objected to further increasing the powers of the Council under the present charters and constitution of the College, alleged a want of confidence in the Council as the sole judge of "disgraceful conduct," because the new by-law might be used to repress actions directed against the present government of the College which might not be covered by By-law 17, and contended that no change in the by-laws ought to be sanctioned which did not include the amendment of Section 17, a by-law most obnoxious to many of the Members. The objections of the Society of Members were forwarded, with the sanction of the Society, to the Council, who drew up a reply, which was sent to the Secretary of State in April. At the Council meeting, held on May 9th, the reply of the Home Secretary was read to the meeting. Mr. Asquith thought there might be some objection to the proposed wording of the paragraphs of the amended By-law 16, on the ground of the wide and indefinite character of their provisions, and suggested that the objects the Council had in view could be attained by means of a by-law in terms similar to those of Section 29 of the Medical Act of 1858, and requested the Council to consider the matter with a view to amending their proposals accordingly. To the other proposed changes Mr. Asquith did not propose to raise any objection. After hearing the letter read, the Council referred it to the President and Vice-Presidents to take such steps in reference to Section 16 of the by-laws as they might deem expedient after consultation with the legal advisers of the College. The result was, we are informed, that the amended by-law was re-worded and the sanction of the Secretary of State has been given to the proposed changes.

WHITSUNTIDE CUSTOMS IN MANCHESTER.

MANCHESTER and the surrounding districts observe Whitsun-week as the great holiday of the year, and it is wholly given up to festivities of one kind or another. Thousands pour out of the city each day in every direction and to various distances on pleasure bent, and the railway companies reap an abundant harvest of third-class fares. With numbers of young men and women employed in offices, shops, and warehouses, it is an eagerly seized opportunity for spending a day or two with their friends at a distance. Moreover, it is the great festival of the various Sunday schools, and is looked forward to by the children as the brightest week of the year, and this year the weather has been exceptionally brilliant. Dressed in their best, and marshalled by their teachers, they assemble in Albert-square and then march in procession through some of the principal streets. On the Monday the children of the Church of England Schools, over 23,000 in number, so assembled, sang the Old Hundredth hymn, and then marched out of the square at 9.30 A.M. The rear was brought up by the boys of the Strangeways Refuge, who did not leave the square till nearly twelve. On Friday a similar scene was enacted by the Roman Catholic schools. These slow-moving, almost endless processions attract thousands of spectators, who line the streets through which the children pass. All traffic is stopped. The ends of the side streets are barricaded with lorries &c. Trams, cabs, carriages, and lorries come to a dead stop till the procession has passed. In however great a hurry, the most energetic man can but rarely cross the line of march, and those driving across the town to the various stations have to wait and let their trains go without them, unless they go round considerable distances by all sorts of circuitous routes. The organisation and management of these processions must be a work of much difficulty, but it would be well to carry it a little further. If occasional gaps were allowed—say between the different schools—the traffic would be less seriously interrupted. At one time it was too much the custom to take the children by rail to places sometimes as far as eighty or ninety miles away, starting early and returning late, with many of the younger ones half dead from fatigue and sometimes wet through. In such marvellous weather as that of last week no great harm perhaps would be done, but it may easily be imagined what half-drowned,

miserable little creatures a wet Whitsuntide would be accountable for. Many, very many deaths have in the past resulted from these Whitsuntide excursions. A more sensible custom seems now to prevail and long railway journeys are not so commonly taken. On the other days the various schools usually hire a field as conveniently situated as possible, in which the children play at various games. The whole of the country round Manchester—especially on the Lancashire side—observes Whitsuntide in the same fashion, so that it is easy to understand the anxiety very widely felt as to weather forecasts.

HABITS AND DISEASE.

THE tyranny of the body finds its most striking exemplification in the subjects of chronic disease, which without actually threatening life so restricts vitality as to modify the whole character of the individual. The old classification of temperaments may be largely interpreted in a pathological sense, for a real basis in organic derangement may be at the root of the physical and moral attributes that the individual possesses. This is, we fear, too often overlooked in persons who belong to the great class of hypochondriacs, for whom, it may be, less sympathy is shown than is deserved. The case of Coleridge is an illustration of this. A recent review of his life in the columns of the *Times* interpreted his "perpetual cry of ill-health" to mean "little less than opium and indolence." This opinion brought forth from the grand-daughter of Mr. Gilman "with whom the poet lived for more than eighteen years" a reply containing a most interesting account of Coleridge's chronic ailment penned by Mr. Gilman, which accounts for much of his idiosyncrasies of character and habits. The passages cited are as follow:—

"From some expressions in your letter I am induced to give you a short account of Mr. Coleridge's personal sufferings and their physical causes, which sufferings at the last were agonising to himself and to those about him. After his decease his body was inspected by two able anatomists appointed by Professor Green, a task too painful for either him or myself to perform. The left side of the chest was nearly occupied by the heart, which was immensely enlarged and the sides of which were so thin as not to be able to sustain its weight when raised. The right side of the chest was filled with a fluid enclosed in a membrane, having the appearance of a cyst, amounting in quantity to upwards of three quarts, so that the lungs on both sides were completely compressed. This will sufficiently account for his bodily sufferings, which were almost without intermission during the progress of the disease, and will explain to you the necessity of subduing these sufferings by narcotics and of driving on a most feeble circulation by stimulants, which his case had imperatively demanded. This disease, which is generally of slow progress, had its commencement in Coleridge nearly forty years before his death. To the general observer his disease masked itself; and his personal sufferings were hidden and concealed by his fortitude and resignation and by the extraordinary power he had of apparently overcoming and drowning them, as it were, at times in fervid colloquy."

The account here given of the post-mortem examination was probably not intended for professional perusal, and is therefore not so precise and definite as to be quite clearly interpreted. Thus it is somewhat puzzling to define the condition described in the right pleura. The large "cyst" mentioned could hardly have been a hydatid. It is more likely, we think, that it was really a pleural effusion, which seemed to be encysted from the presence of adhesions of the lung to the chest wall. If this be so then this effusion may be regarded as dropsical in character, occurring towards the close of life in a subject of chronic cardiac dilatation. The account which describes the enormous size of the heart and the extreme tenuity of its walls is silent as to the pericardium, but such a degree of enlargement may well have been due to universal adhesion of the heart to the pericardial sac, from inflammation of the latter in early life. The record, however, suffices to prove that this intellectual giant must have suffered more than the world was aware of, and it can be understood that his "indolence" as well as his opium habit had a physical basis. It can only add to the marvel with which his achievements are justly regarded that one so physically disabled should have made such extensive and profound contributions to philosophy and literature. It is one more instance of the triumph of mind over body.

MEDICINE AND CRICKET.

WE congratulate Mr. W. G. Grace on the enthusiastic unanimity with which all classes of the community have welcomed the idea of presenting him with a testimonial. We entirely sympathise with a movement having for its object a material proof of the general recognition of the qualities which have raised Mr. Grace to his position of champion exponent of the national game and—by far the more wonderful thing to tell—have maintained him in that position for twenty years. Skill, endurance, patience, courage, strength, delicacy of movement, and alertness constitute in different proportions the endowments of the successful cricketer, and the pre-eminent champion at the game may therefore be credited with having displayed for years a just combination of them all. What better man can the sport-loving Briton find to honour than the author of such a display? Mr. Grace's connexion with our profession naturally turns our thoughts, subdued to what they work in, in one direction: Has his profession assisted in this maintenance of a remarkably high level of athletic prowess And we make bold to say, Yes. We are not claiming that because the well-trained eye, the skilful hand, and the temperate mood equally comprise the chiefest virtues of the surgeon and the cricketer, a medical education should turn out experts at Lord's. Such a claim, by working both ways, would land us logically in the recommendation to our readers of Gunn for an enterostomy or the younger Bruce for a litholapaxy! But we do claim that Mr. Grace's profession has counted for much in keeping him through two decades in the absolute front of the cricketing world. It has given him a wise insight into the rules of health, and furnished him with a knowledge of reasons that cannot have failed to be useful to him in times of physical or mental depression on the field, in unfortunate conjunctions of the game, even in seasons of comparative ill-success. And, considering that his display of ever-green vigour reflects honour upon the principles of medicine, we recommend to the favourable consideration of our readers the project of a national testimonial to our professional brother.

COLOUR MUSIC.

ON Thursday, June 6th, a large number of people interested in physics and in music were present, at the invitation of Mr. Wallace Rimington, an artist, to witness the first public demonstration of "a new art," the application to colour of qualities—rhythm, and the capability of instantaneous and varied combinations—which have till now been associated with music only. This Mr. Wallace Rimington effects by means of a "colour organ," the exact construction of which was not explained. The organ has a key-board like that of an ordinary organ, and by some ingenious contrivance the keys introduce corresponding coloured discs in front of a powerful arc or lime light, so that any particular colour, or combination of colours, may be projected on a screen. Each note on the key-board has its own colour, an octave representing the ordinary spectrum. The spectrum has been divided up into diatonic intervals or notes, the intervals being calculated according

to the rate of vibration at different parts of the spectrum in the same manner as with the musical scale. Single notes and chords can be struck on this organ with the same ease as on a pianoforte, and a rapid flitting of soft, transparent tints on the screen is the result. In order to show what could be done, extracts from Chopin were rendered simultaneously on the colour organ and on the pianoforte, and later selections from Wagner's "Rienzi" were given by an orchestra and the colour organ together. The effects were novel and in the main pleasing, but it was difficult to appreciate exactly the artistic value of the performance, the eye being at present entirely untrained for following and enjoying the rapid changes of colour. It was evident, too, that even if, which is by no means proved, the spectrum and musical octave are physically exactly analogous, there is a much less close resemblance in the psychical effects produced. Two points which were very obvious at the demonstration illustrate this point. Red and green occur close to one another in the spectrum, but the contrast in passing from red to green on the keyboard of the colour organ is much greater than that perceived with the analogues on the musical keyboard. Another difference was noticeable when a chord was struck. Instead of the chord being richer than its component notes, in many cases only a neutral greyish tint was obtained owing to the physiological antagonism of many of the colour sensations. Possibly more pleasing effects may be produced by compositions specially designed for the exhibition of colour in a rhythmical manner than by merely using pieces composed for musical instruments. The departure is a novel one, and we would congratulate Mr. Wallace Rimington on the perfection to which he has brought his mechanical contrivance and on being a pioneer of a new mode of artistic expression the ultimate developments of which may possibly rival painting and music.

DEFECTIVE NERVOUS SYSTEM IN A CAT.

IN a recent number of *Brain* Dr. Risien Russell gives an account of the central nervous system of a cat, the symptoms in which during life had reminded Dr. Carruthers, from whom he received the animal, of the conditions presented by some dogs shown by Dr. Russell at a meeting of the Neurological Society in which ablation of one lateral lobe of the cerebellum had been practised. In this cat during life there was evidence of paresis of both posterior extremities and of the right anterior extremity, a condition corresponding to that met with in dogs after ablation of the right lateral lobe of the cerebellum. After death it was found that the skull presented no asymmetry, and the membranes were normal and not unduly adherent at any particular spot. The whole brain was below the average size, but there was no evidence of special atrophy or defective development of any part in particular except that the right hemisphere was a little smaller than the left. In the cerebellum notable changes were present. The whole organ was smaller than normal, smaller also in proportion to the small size of the cerebrum, but the right lobe was only about one-third of the size of the left. It was diminished in all its dimensions, and the right half of the pons and medulla shared in the defect, although not in such a marked degree. The two lateral halves of the cord did not seem to share in the asymmetry. The cranial nerves were smaller on the right side than on the left; the spinal ones presented no notable difference. Examination of the specimen after hardening and staining revealed further points of interest. The internal capsule and the crus cerebri on the right side were found to be distinctly smaller than those on the left. The right pyramid was completely absent except at the lowest part of the medulla, but at the level of the decussation a few fibres were seen occupying the region of the anterior pyramid on the right side. At the decussation the normal left pyramid bifurcated, and while most of its fibres passed to the opposite crossed pyramidal tract a considerable number passed to the crossed pyramidal tract of the same side. Compensation by this means seemed to be so complete that with the exception of a possible slight difference in the lumbar region the spinal cord appeared to be quite symmetrical. Practically no trace of fillet fibres could be found on the right side, and on this side also the superior, middle, and even the inferior cerebellar peduncles were extremely diminutive. The cranial nerves also were found to be smaller on the right side, although they were not all equally so. The superior olivary body was slightly smaller on the right side, but the inferior on this side was very well developed, while on the left side it was very poorly developed. The nucleus of the funiculus gracilis and that also of the funiculus cuneatus were smaller on the left side than on the right. In conclusion, Dr. Russell points out that in this case there was clearly a well-marked condition of defective development on the right side of the cerebellum, pons, and medulla. The associated defects in structures of the left side and the integrity of certain structures on the same side, in which defect might have been expected to be present, are referred to in a series of deductions at the conclusion of the paper, to which we would refer the reader. The paper is also illustrated with a series of good collotype plates, and furnishes an excellent account of an interesting and instructive case, especially interesting in reference to the valuable experimental work recently carried out by Dr. Russell on the functions of the cerebellum.

THE "ALCESTIS" AT BRADFIELD.

THE presentation of a Greek play to a modern audience, with, as far as may be, all the essential features of Greek tragedy reproduced, has been attempted many times, but never, we fancy, with such success as at Bradfield. This success mainly depends upon the play taking place in an open-air theatre constructed after the classical model, a fact which necessarily tends to make the representation far more realistic than any performance in a college hall. The dresses were faithfully copied from vases and sculptures, and the music was written strictly in ancient modes, the instruments being five lyres and four "flutes," or rather chalumeaux, a primitive form of clarionet. We must warmly congratulate Mr. Abdy-Williams, the composer, and his musicians for the way in which the music was rendered, and if a reed did "quack" now and then that is an accident which may happen to the most accomplished player. Of the play itself we can truthfully say that all the actors bore themselves with becoming dignity. One or two minor points in stage management may be noticed. The actor who played Death had his hands stained blue, while his face retained its natural colour. Now, if Death was meant to be made up like a person deeply cyanosed, which we presume was the case, his face ought to have been blue too. Again, when the *dead* Alcestis was brought on and her face uncovered by Admetus, she exhibited the rosy hue of perfect health. A little artificial pallor would have remedied this. Perhaps this may seem captious criticism, but when all else was so carefully done it seems only right to point out how the slight flaws which did occur could have been avoided. Mr. Wood Hill's reading of the part of Alcestis was very careful and all over-exaggeration successfully avoided, and Dr. Gray succeeded in making one feel really sorry for Admetus, a difficult task when we take into consideration what a miserable person he was. This is not the place to discuss the various theories which have been formulated as to Euripides' ideas of the legend; but for our own part we think a slight extension of Dr. Verrall's rationalistic theory will suit. Euripides was a sort of

Athenian Gilbert; the whole play is a solemn burlesque like "Engaged" or the scenes in "Iolanthe" between the two peers as to which of them shall sacrifice himself on account of Phyllis; while the obvious truism uttered at the last by the chorus, "The unexpected always happens," is in the purest spirit of burlesque. Be this as it may, the performance was most interesting, and the organisers are to be warmly congratulated, not only upon their dramatic success, but upon the excellent arrangements made for the comfort of their guests in the way of transport and seating accommodation. On June 11th the guests included many distinguished in literature and art. From Oxford came the heads of Trinity, Corpus, Brasenose, Oriel, and University, the Deans of Pembroke and Magdalen, from Cambridge Professor Sidgwick. Art was represented by Mr. Waterhouse, R.A., and Mr. David Murray, A.R.A.; education, from a Government point of view, by Lord Lingen, and by the Headmaster of Winchester as representing the public schools.

THE FUTURE OF CHARING-CROSS HOSPITAL.

IN our issue of last week we remarked that it was very doubtful whether the proposed transfer (as suggested by "X." in the *Times* of June 1st) of Charing-cross Hospital to South London would improve its financial position. "X." now writes to the *Times* saying that he has heard rumours that in consequence of his letter of the 1st inst. money has ceased to flow in, and subscriptions have stopped because the hospital is going to be moved. If this be the case when the removal is merely suggested, how much the more would it be when the change was accomplished? There may be "the potentiality of riches beyond the dreams of avarice" in Camberwell; but we still fancy that "Cœlum, non animum, mutant qui trans mare currunt" would be the result of a move across the river. At a meeting of the council held at Charing-cross Hospital on Wednesday the schemes recently projected in *The Times* were repudiated, and the idea of entertaining any of the proposals on the lines suggested was emphatically rejected.

THE ELECTION TO THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT the election to the Council of the Royal College of Surgeons of England, which will take place at 1.30 P.M. on Thursday, July 4th, there will be five vacant seats to be filled. The three members of the Council who are retiring by rotation in accordance with the terms of the Charter of 1843 are Sir T. Spencer Wells, Bart., Mr. Jonathan Hutchinson, and Mr. Alfred Willett. Sir T. Spencer Wells, Bart., was elected in 1871 and re-elected in 1879 and 1887, and has therefore served on the Council for nearly a quarter of a century. Mr. Hutchinson was elected in 1879 and re-elected in 1887, and has therefore served for sixteen years. Neither Sir T. Spencer Wells, Bart., nor Mr. Hutchinson is a candidate for re-election. Mr. Alfred Willett, one of the present Vice-Presidents, who was elected in 1887 and has therefore completed one full term of office, is standing for re-election. By the lamented deaths of Mr. Hulke and Mr. Durham two other vacancies have been created. Mr. Hulke was elected in 1881 with the present President of the College, and re-elected in 1889, so that his term of office would have expired in 1897. Mr. Durham was elected in 1884 and re-elected in 1892, and his term of office would not have expired till 1900. The candidates who are returned to fill the vacancies created by the decease of Mr. Hulke and Mr. Durham will be elected as "substitute members" to complete the respective terms of office which Mr. Hulke and Mr. Durham would have enjoyed. The candidate who stands fourth on the poll will take the place of Mr. Durham, whilst the seat of Mr. Hulke will fall to the fifth successful candidate. This system of "substitute membership" gives rise to much inconvenience and inequality and should be abolished. For the five vacant seats there are nine candidates, including Mr. Willett (Fellow, 1862; Member, 1859). In the order of seniority as Fellows the other candidates for election are: J. Ward Cousins (Fellow, 1860; Member, 1856), A. T. Norton (Fellow, 1867; Member, 1862), William Anderson (Fellow, 1869; Member, 1867), Alfred Cooper (Fellow, 1870; Member 1861), J. N. C. Davies-Colley (Fellow 1870; Member, 1868) H. T. Butlin (Fellow, 1871; Member, 1867), H. W. Page (Fellow, 1871; Member, 1869), and Frederick Treves (Fellow, 1878; Member, 1875).

PRESCRIBING DRUGGISTS.

AGAIN the old story. Frederick William Biggs of Cardiff had a son, Arthur, who was taken ill. The father, instead of sending for a medical man, applied to a druggist, who supplied him with some medicine. The child died from, as a post-mortem examination showed, acute bronchitis. The medicine had done no harm. The coroner thereupon censured the chemist for prescribing, in which censure the jury concurred, while they also very justly blamed the parents for not calling in a medical man sooner. This sort of cases will continue to occur until ignorant people can be divested of their fixed idea that a medical practitioner is a man who gives "bottles" each containing a specific remedy, or until druggists are prohibited from prescribing by law; and as anyone, no matter how ignorant, may prescribe, we fear that the latter course will hardly be followed.

AN ACTION BY A DENTIST FOR THE RECOVERY OF FEES.

AN action brought by a dentist for recovery of fees has recently taken place at Doncaster. The amount claimed was £33 12*s.* for professional services rendered to the family of the defendant, and of this sum £21 10*s.* were charged for the treatment of an "irregularity of the teeth." The defence set up was that the fees were excessive. Professional evidence was given on both sides, a verdict being returned for the plaintiff for the full amount, with costs. In fairness to the plaintiff it would have been difficult to have arrived at any other conclusion; while looked at from a general point of view the result is satisfactory, inasmuch as it shows that the law is willing to protect the professional man who charges reasonable fees against clients who place their own estimate on services they know but little or nothing about.

THE TRANSPORTATION OF THE DEAD IN AMERICA.

THE *Journal of the American Public Health Association* publishes a paper on the Innocuous Transportation of the Dead, by Dr. J. D. Griffith, in which he remarks: "Until we are educated to the point of the thorough sanitation of cremation the transportation of dead bodies by railways is, and always will be, a source of danger." This danger, however, we are happy to think, does not threaten our own country in the same degree as it does America, where dead bodies are quite commonly put in baggage cars along with, perhaps, twenty or thirty trunks. It is clear that if the person has died from an infectious disease and the coffin is not hermetically sealed, the luggage may become infected, and by its distribution could prove the cause of wide-spreading mischief. Not only this, but the health of the railway employés is menaced. In 1888 the National Association of General Baggage Agents, includin most, if not all, of the main carriers of the United States, adopted a schedule of rules and forms to govern the transportation of corpses, in which it was suggested that a corpse should be wrapped in a sheet saturated with a strong solution of bichloride of mercury and packed in a specified casket.

The writer gives it as his opinion that many dangerous maladies have been spread by handling and shipping the dead body, and believes that the whole country must have benefited from these rules, as most of the State boards of health have not only approved but adopted them with little or no modification. It has been suggested that in all cases where a death occurs from an infectious disease the body should be interred in the same neighbourhood where the death takes place; but, as Dr. Griffith points out, endless trouble might follow with many people who would leave no stone unturned to enable them to remove the body if they so desired. This being so, the only practical suggestion seems to be that a portion of the baggage car should be provided with metal-lined compartments and be used exclusively for the purpose of conveying dead bodies from one place to another. By this means the risk of infection would be considerably minimised, both to the employés of railways and the travellers who entrust their trunks to the care of the railroad companies.

MR. GLADSTONE AND HIS CORRESPONDENTS.

No one, perhaps, except a statesman, can fully appreciate the meaning of Mr. Gladstone's request that no letters should be addressed to him during his absence from England. To the very young the postman is generally looked upon as a kind messenger who always brings glad tidings, and when adolescence is reached and the mischievous heathen deity has caused the pulse to quicken and the pupil to dilate the double knock is far from being an unwelcome sound. To the man of business, however, the postman is looked upon with far different feelings, and the sight of the Post-office messenger is very apt to call up in his mind a vision of a large batch of letters marked urgent and confidential, which for the most part when opened will be found to contain advertisements relating to somebody's New Neuritic Nervine, or a request for a subscription to the Mutual Protection Society of Nostrum Advertisers. Such things are not calculated to conduce to a peaceful state of mind even in the ordinary man of business, and are certainly not likely to soothe an over-worked statesman. It is said that Lord Rosebery during his recent illness was the recipient of a considerable number of letters marked private and confidential which contained recipes for insomnia, and we do not doubt that the late Premier has received similar well-meaning attentions during the time he has served the State. Mr. Gladstone, who is now in his eighty-sixth year, was found, when examined by his medical attendant in the early part of 1894, just before his resignation from active political life, to have a vigorous heart, a good appetite, sound lungs, and muscular limbs, and to be full of vivacity and vitality after sixty years of Parliamentary life. He left England for his annual rest on Tuesday last—if such a man can be said to ever take rest,—when his temperature was 98° F., and he started in excellent spirits after a very good night's rest. We sincerely hope that he may return in good health, and that his simple request that he may not be worried by a needless correspondence may be complied with.

THE CORONER OF BIRMINGHAM AND THE COUNTY CONSTABULARY.

WE commented last week on the action of the county constabulary in resisting the request of Mr. Oliver Pemberton, the city coroner of Birmingham, that a man named Saunders, under arrest upon the charge of murder, should be present, if he so desired, at the inquest upon his victim. The bare fairness of the proceeding would seem to everyone to justify Mr. Pemberton in his objection to subordinate resistance, and we are glad to say that after a week's delay, and at the cost of trouble to himself and the jury, he secured the presence of the man. The Commissioners of Prisons sent an order to the Governor of Warwick Gaol directing that the prisoner should be brought to the coroner's court independently of the action of the constabulary. The verdict that was eventually returned showed how completely the coroner was right in his action, and we hope that other coroners finding themselves in the same position will use this example as a means to their end. The case, it may be noted, was not without interest to the profession from a purely medical aspect. The evidence went to show that the victim had been stabbed about the head with a clasp-knife, but as the external injuries—two stabs, one above the left eye and the other below the left ear—appeared to be slight, and were accompanied by no signs of serious mischief, no objection was raised at the hospital to his desire to return home. This was on the Saturday evening, May 25th, but on the Monday morning symptoms of cerebral inflammation were present, and he was detained at the hospital. He was trephined, but died on Tuesday of meningitis. The post-mortem examination showed that the knife had penetrated the brain substance for some distance, though the injury to the skull was one which it would have been impossible to detect.

THE INFORMAL PURCHASE OF POISONS.

WE print under this heading in another column a letter from a Brighton surgeon who, in reference to the numerous cases of dog-poisoning that have recently occurred in Sussex, points out the extreme ease with which it is possible for laymen, complying with no formality whatever, to procure large quantities of deadly poison from wholesale druggists. The anecdote which he relates in his letter (p. 1543) discloses a distinctly illegal proceeding, and one which we hope is not common, which, indeed, cannot long be common without the occurrence of some terrible accident. The business of wholesale dealers in supplying scheduled poisons, as the *Pharmaceutical Journal* points out this week, is only exempted under the Pharmacy Act, 1868, in so far as they supply them "in the ordinary course of wholesale dealing." Transactions with private individuals who require poisons for their own use are not covered by this exemption, and it is quite possible, therefore, that if satisfactory evidence of such illegal sales were forthcoming, the Pharmaceutical Society would be able to move in the matter and check a practice which is both unworthy of any respectable wholesale house and pernicious in its tendencies.

THE MANUFACTURE OF COMPRESSED GASES.

IN a leading article in THE LANCET of March 23rd we expressed the hope that the Government would see its way to institute with little delay an inquiry with the view of placing the manufacture of compressed gases under some kind of legislative control. Our remarks were based upon the explosion of a gas cylinder at Fenchurch-street Station a short while ago, by which one man lost his life, while the damage done to property was by no means trifling. We now learn with satisfaction that the Departmental Committee which has been appointed by the Home Secretary to inquire into and report on the manufacture, filling, and use of gas cylinders will meet shortly to elect a chairman and arrange certain preliminaries. Visits are then to be paid to the centres in London and in the country where these cylinders are produced, and expert evidence is afterwards to be taken on the whole question of the manufacture of compressed gases. It will be remembered that the cause of the cylinder exploding at Fenchurch-street Station could not easily be accounted for, and the evidence given at the inquest was somewhat conflicting. The explosion may have been due to the

cylinder receiving a shock by coming suddenly into contact with a hard surface like the stone platform, in which case the metal must have become brittle or crystalline through neglect to re-anneal it, or to the cylinder containing inadvertently a mixture of hydrogen and oxygen, besides some oil which may perchance have trickled down from the connecting screws of the cylinder into the interior, and, heat being established by the oxidation and possible ignition of the oil, the union of hydrogen with oxygen with explosive violence was inevitable. Whatever may have been the cause it is perfectly clear that the subject is ripe for inquiry, especially as this comparatively new industry (the compressing of gases such as hydrogen, oxygen, carbonic acid, &c.) is largely on the increase. We are glad, therefore, to learn that the Home Office has so far acted with the promptitude which the question demands; the committee is to sit on the 24th inst., and the proceedings will not, it is thought, occupy longer than a fortnight. We await their report with interest.

"LE MÉDECIN MALGRÉ LUI."

AN account appeared recently in the columns of the *St. James's Gazette* and the *Pall Mall Gazette* of an ingenious application of the "put-a-penny-in-the-slot" system. The machine is figured in the likeness of a man, and reduces specialism to a fine art, for instead of the one or two slots which the carnal and earthly sweetmeat or cigarette machine has, this is provided with slots corresponding to every member of the body. Has anyone a headache? On inserting a coin into the slot in the head the machine, after due consideration, hands out a prescription for the evil in question. The machines do not make up medicine, but the address of the nearest druggist is given. It only remains for some enterprising philanthropist to supply London with these machines, and the relief to the overcrowded out-patient department of our hospitals would be marked. Gone, too, would be the occupation of "Lennox" and "Bornal, M.D.," of the gentleman who appeals so eloquently from the hoardings with "Why suffer longer?" and all the other newspaper prescribers.

THE CARMARTHEN DROWNING CASE.

IN our issue of June 8th we noticed the severe strictures passed on Mr. Bowen-Jones by the coroner. We have since had the opportunity of perusing a report of the inquest contained in a local paper, with the result that we adhere fully to our previous remarks. It appears that a boy on his own initiative—prompted, no doubt, by a most excellent motive, instinctive humanity—went to Mr. Bowen-Jones and said that aid was wanted as some children had fallen into the water. The lad deposed that he was so excited at the mishap and with running that he was not certain what impression his words would exactly convey to Mr. Bowen-Jones, but that he gave that gentleman to understand medical aid was needed. It is alleged that Mr. Bowen-Jones asked the boy who was going to pay his fees if he went. From information supplied by Mr. Bowen-Jones it seems that unfounded rumours of accidents are not uncommonly raised and circulated, and that on several occasions he has attended calls only to find that he was not wanted. As regards the inquiry as to the payment for his attendance we are assured that it was only made in a playful way, and indeed this seems to be the most reasonable explanation of Mr. Bowen-Jones's words, for he would not expect to receive a guarantee of remuneration from a lad under the circumstances narrated. We learn that Mr. Bowen-Jones at the time was on his way to minister gratuitously to a patient, and therefore it was not greed of gain that deterred him from acting on the statement made by the boy. But apart from these facts, which we consider Mr. Bowen-Jones has reasonably explained, we maintain that the coroner would have more fully acted in the spirit of judicial impartiality if he had adjourned the inquest for the purpose of taking Mr. Bowen-Jones's evidence. To condemn him unheard, and that, too, in the strongest denunciatory terms, runs counter to our sense of equity. No doubt the coroner was entirely within his legal rights in taking the course he did, but there are statements which are privileged, and which yet do not meet with the sanction of abstract right. At the inquest the jury were not unanimous in adding a rider censuring Mr. Bowen-Jones for his conduct, a fact showing that there were some at least who felt that such proposed rider was not justified by the evidence before them. It is matter for regret that the coroner did not identify himself with the course these gentlemen adopted.

THE SPREAD OF INFECTION.

A CASE recently decided in the Borough Court, Brighton, is instructive in its bearing upon the isolation of cases of infectious disease. The defendent was summoned for having travelled from Brighton to London by rail and cab while conscious that he was suffering from scarlet fever. In defence he pleaded ignorance of his condition, and alleged in support of his statements the uncertain opinion of his medical attendant respecting the early phase of his disorder. This plea not being proved, a sentence of £5 and costs was inflicted. This unfortunate sequel to a successful recovery possesses more than one feature of medical interest. It impresses the great importance of dealing cautiously even with cases of doubtfully infectious character, and of treating them so as to cover the possibility of contagion. As regards their removal, this of course is undesirable as much in the interest of the patient as of the public. Where it is for any reason imperatively called for, the needful arrangements ought to be entrusted to the local sanitary authorities.

A HEALTH CRUSADE.

A PROPOSAL by Mr. Samuel Osborn, F.R.C.S., which was discussed at the Slough Ruridecanal Conference, touches a subject the importance of which is only equalled by the extent of its application—that of hygiene among the poor. A motion "that combined action be taken by the clerical and medical professions for the purpose of inculcating among the poor some of the more important principles of hygiene," notwithstanding a certain apparent confusion of ideas, cannot but evoke the respect due to its disinterested sincerity. We do not quite see how the clergy can be joined in partnership with the medical profession as teachers of hygiene. Mr. Osborn explains himself, however, and the riddle no longer seems to be inscrutable. He does not desire to form within the ranks of the Church a new staff of medical officers of health, but rather to obtain for the existing members of this order, and for such of their purposes as may be classed as a species of first aid in sanitation, the local influence wielded by the spiritual arm. Fresh air, cleanliness and thrift, simple, nutritious, and cheap feeding, good plain cookery, and regulations as to burial,—such, in brief, are the subjects which it is proposed to bring within the active sphere of the new administration. The same object has been in some degree attained already in North Bucks by the appointment of what are called "health missioners," a class of women who visit among the poor and teach them the outlines of sanitary science as applied in the practice of household duty. Those of us who know something of the gross ignorance and indolence which prevails in many country districts respecting this important subject will welcome help which is reliable from whatever quarter. We hope, too, that sanitary authorities, being thus befriended with assistance, will exert

themselves, in country as in town, to incorporate the facts of sanitation more and more with the daily life of their respective districts.

DIPHTHERIA IN LONDON.

THERE are at present no signs of diminution of diphtheria prevalence in London such as were apparent some time back, seeing that, whether regard be had to the cases or to the deaths, the disease has been maintaining itself in recent weeks in a manner which suggests endemicity of considerable proportions. In the four weeks ended May 18th there were 638 notified cases of the disease in London, and 135 registered deaths therefrom, the per case mortality thus yielded being just under 21·2 per cent. In the three weeks that have since elapsed the cases have averaged 165, or nearly 500 in all, and the deaths 111, the per case mortality in the successive weeks having been 22·3, 25·2, and 20·0 per cent. In the four-weekly period just named the disease was present in all the London sanitary areas save two; and of the 638 cases there were 20 and upwards in each of the 15 districts, the largest numbers occurring in Camberwell (63 cases), Poplar (46 cases), Lambeth (34 cases), and Hackney (33 cases). In the four weeks ended last Saturday the registered deaths from diphtheria numbered respectively 41, 37, 41, and last week 33, a figure 7 in excess of the corrected average of the corresponding week of the preceding decennium. Of these deaths 3 each are credited to Paddington, Islington, Hackney, Shoreditch, and St. George-in-the-East sanitary areas. All the 33 were in persons aged under twenty years, and 23 at ages one to five years. The admissions to hospital were 86, as compared with 87, 79, and 88 in the three preceding weeks, at the close of which the patients remaining under treatmentn umbered 484, 492, and 508, as compared with the increased total of 529 last Saturday. In Greater London last week there were 16 registered deaths from the disease, of which no fewer than 8 were in the West Ham district.

INSECTS AND CONTAGION.

IT is generally understood that the stings of some insects are essentially poisonous in a greater or less degree, and must therefore be early and carefully treated. Pain alone in such cases will suffice for a danger signal, and few when thus warned would care to neglect the puncture made by a hornet, a wasp, or even a bee. The fact that other insects, like some species of fly, are capable of equal or even greater mischief, is not so commonly known as it ought to be. The recent death of a woman Kingston from septic erysipelas thus caused may be quoted in illustration. In accounting for such occurrences two points are specially noteworthy—namely, the condition of health of the person attacked, and the previous *habitat* of the assailant. In no case probably is it possible to define exactly the influence exercised by each of these contributing factors. This much we know, however, that no matter how trivial or how great the effect of the conveyed poison, it is much enhanced by all conditions of weakness or blood impurity existing in the sufferer. A mere midge or gnat-bite in one person will prove almost as serious in its effect as a septic wound in another. There are in the system all the materials for a conflagration, and a spark may light it up as well as a firebrand. The habits of insects afford a clue to the seeming vagary of their occasional and accidental virulence. The sting or the mandibles, which perhaps were buried an hour previously in some putrid sore, excreta, or offal, cannot penetrate a living tissue without leaving in it something of the same putrid character. It is safer therefore for the medical practitioner to regard each and every injury of this kind, however slight, as a possible source of illness, and at once to contrive its relief by poulticing, antiseptic compresses, or like means. For prevention we can suggest no better safeguard than some form of antiseptic veil, to be worn after the manner suggested in THE LANCET of Aug. 6th, 1892.

SIR WILLIAM MACCORMAC has received an official letter, signed by the president and secretaries of the Belgian Surgical Society, saying: "Nous avons l'honneur de vous informer que la Société Belge de Chirurgie, dans sa séance du 27 avril dernier, vous a conféré le titre de Membre Honoraire en témoignage des grands services que vous avez rendus à la science chirurgicale." We congratulate Sir William MacCormac on this intelligent and graceful appreciation of his surgical work.

ON Friday next, June 21st, at 6 P.M., in the Town Hall, Kensington, an interesting ceremony will be performed. The Marquis of Lorne will preside at the presentation to Mr. and Mrs. J. J. Merriman of a testimonial subscribed by their friends in Kensington in recognition of Mr. Merriman's services as a medical man. The Merriman family have been medical men in Kensington for over 100 years.

THE Cavendish Lecture of the West London Medico-Chirurgical Society will be delivered at 8.30 P.M. on Thursday, June 20th, in the Vestry-hall, The Broadway, Hammersmith, W., by Sir J. Crichton-Browne, M.D., F.R.S., who has taken as his subject "Dreamy Mental States." A conversazione will be held after the lecture.

THE annual dinner of the Army Medical Staff will be held in the Whitehall Rooms of the Hôtel Métropole at 7.30 P.M. on Monday next, the 17th inst. Those intending to be present are requested to communicate immediately with Brigade-Surgeon-Lieutenant-Colonel Hector, 25, Anerley-park, Anerley, S.E.

THE Bowman Lecture of the Ophthalmological Society was delivered to-day (Friday) by Dr. Gowers, who took as his subject "Subjective Visual Sensations." We shall print Dr. Gowers's able paper in an early issue.

THE annual meeting of the British Dental Association will be held in Edinburgh on Aug. 28th, 29th, 30th, and 31st.

THE death is announced, at an advanced age, o M. Verneuil, the eminent French surgeon.

THE ROYAL SOCIETY CONVERSAZIONE.

"LADIES' night" at the Royal Society, which this year was held on Wednesday last, sees a repetition of the things shown at the previous *soirée* held in May,[1] which to science is as the opening of the Academy is to art—a revelation of the year's work and of the year's developments. Probably the council arrange that the exhibits that are found to attract the greatest interest at the first conversazione shall be shown again for the delectation of the fair visitors and friends of the Fellows. Thus for brilliant effect the projections upon the screen by means of a lens and mirror of the molten contents of the electrical furnace of Professor Roberts Austen, which is used for the preparation of the diamond form of carbon and for the melting of chromium and similar refractory metals, could hardly be rivalled, while the four globes exhibited by Mr. W. N. Shaw, in which were illustrated the phenomena associated with the formation of cloud, were equally attractive and pretty, though they were not concerned in the employment of such powerful forces. Again the interesting collection of Mr. W. T. Burgess, consisting of cultivations of slices of potatoes over which flies

[1] THE LANCET, May 4th, 1895.

infested with a chromogenic organism had walked, demonstrating in a most striking way the extreme possibility of the transmission of infection by flies, was, as the importance of the exhibit demanded, shown once more. The spectra of argon and of helium (or helion, as we should now write it) mixed with argon were of course re-exhibited by Professor Ramsay, and the interest in these recent discoveries was accentuated by the excellent series of photographs shown by Professor J. Norman Lockyer. Amongst them were the photographs of the apparatus employed for collecting the gases obtained from minerals by the distillation method *in vacuo;* the photographs of the spectra of Bellatrix and of a part of the solar chromosphere, showing coincidences with the lines photographed in the spectra of gases from "uraninite"; and photographs also of the spectra of the new gases. The ingenious electrograph of Messrs. Nalder Brothers and Co. attracted a good deal of attention. In this process the fabric is first damped and then a current is passed for about two seconds from a silver die, the metal of which in contact with the fabric appears to form a cellulose compound, which is colourless. On reversing the current, however, the silver in the fabric is reduced, the result being that an indelible mark of metallic silver in the tissue is made, which to some extent corresponds with that produced by marking ink. Mr. Francis Galton showed the value of observing minutiæ in finger prints. In a very distinct photograph in a case of twins, whose portraits, classificatory measures, and finger-print *formulæ* were closely alike, it could be clearly seen that the finger-print *minutiæ* are quite different. Excellent demonstrations are commonly expected of Mr. Boys, who in past years has been known for his remarkable experiments with bubbles and the velocity of bullets. On the present occasion he showed on the screen the exceedingly pretty effect of the ripples produced by tuning forks upon the surface of mercury, which are so small and travel so quickly as to be invisible unless illuminated either instantaneously or intermittently at the proper rate. Dr. J. Joly exhibited his photographs in natural colours, the process of taking and reproducing them differing in no way from ordinary photography upon the dry plate, except that the sensitive plate is exposed behind a screen in the camera in particular colours. The colours so registered are brought to view by means of a superimposed screen lined with three other colours. One of the points of interest connected with the exhibit of the Marine Biological Association consisted in the fact of the efficacy of formic aldehyde in dilute solutions in preserving transparent organisms.

Lastly, the interest shown in the exhibit of the Postmaster-General in the archives room was almost beyond the limits of accommodation afforded by the room. Here for the first time telephonic communication was established with Edinburgh, Glasgow, Belfast, and Dublin. Those who were fortunate enough to secure receivers were amused and almost awed to hear the spoken communications of individuals in Dublin, which by the route taken by the cable was 467 miles away. At Edinburgh and Glasgow a musical programme was provided, the performance of which could be heard with marked distinctness, the notes of the bagpipe from the latter place being particularly audible. The wires to Ireland extend through Leeds and Carlisle to Portpatrick, thence by cable across St. Patrick's Channel to Donaghadee, thence to Belfast and Dublin. The charges for communication between the principal towns varies from 6*d.* in the case of Glasgow to Edinburgh, to 7*s.* 6*d.* London to Dublin, for three minutes' conversation. The line is built with the heaviest copper wire ever erected, and weighs on an average 800 lb. per mile.

REPORT OF THE COMMITTEE ON PRISONS.

IV.[1]

Is the present prison system sufficiently deterrent? We have already pointed out that it is the opinion of the committee that so far as first offences are concerned the present prison treatment in convict and local prisons is amply sufficient for the purposes of deterrence. The Royal Commission of 1863 expressed an opinion that the penal servitude system then in force "appeared not to be sufficiently dreaded either by those who have undergone it or by the criminal classes generally." The Royal Commission of 1879, however, declared, after full investigation, that "the system [i.e., in the case of convicts] is effective as a punishment"; and the committee go on to say that "a similar opinion in relation to local as well as convict prisons has been expressed by the most competent witnesses whom we have examined." But here a question of the utmost importance arises, that of the length of sentences. Among the numerous witnesses examined there appeared to be a consensus of opinion on two points in this connexion. First, they agreed that as a general principle short sentences were most desirable in the case of first offenders and where extenuating circumstances could be shown to exist. Secondly, they agreed that short, non-cumulative sentences on old criminals and on persons habitually drunk and disorderly were almost altogether ineffectual. Although this leaves out of consideration that group of offenders who are brought to trial for the first time because they have committed serious crimes against property or gross or violent crimes against the person, we may fairly take it that this consensus of opinion has reference to the great bulk of persons engaging in crime and coming under penal discipline in prison. This being so, we arrive at an excellent basis whereon to build up a scheme of practical dealing with the vast majority of offenders, so long as due care is taken not to let the term "first offenders" become too elastic in its application. It may not be out of place here to point out that the factors of which punitory deterrence in prisons is made up are mainly five in number—viz.: (1) deprivation of liberty, (2) restricted diet, (3) compulsory labour, (4) disciplinary training in regular and cleanly habits, and (5) interdiction of social companionships and comforts. But it must not be forgotten that, although these factors are primarily punitory and repressive, they are all more or less the elements upon which consistency and strength of moral character are based, and that it is impossible to do without them in any efforts that are made in moulding or reforming the moral tone of individuals. We believe the committee themselves would recognise this position. Speaking of what they refer to as the "character of necessary changes" they say: "We think that the [prison] system should be made more elastic, more capable of being adapted to the special cases of individual prisoners; that prison discipline and treatment should be more effectually designed to maintain, stimulate, or awaken the higher susceptibilities of prisoners, to develop their moral instincts, to train them in orderly and industrial habits, and, whenever possible, to turn them out of prison better men and women, both physically and morally, than when they came in." This is the veritable Utopia which all prison legislators and philanthropists are ever dreaming of and looking forward to. It is an ideal which is far more easily planned out than put into practice. The "less elastic" system has proved to be fruitful of good results, so far at least as it can lay claim to having been a means to an end, that end being the reduction of the prison population; and if a more elastic policy is now to find favour we feel sure that the elasticity must be instituted as an adjunct to, and not as a substitute for, those factors of deterrence to which we have referred, and which form the groundwork of the existing prison system. This, we think, ought to be made sufficiently clear before any fancied "new broom" methods are placed upon their trial. The committee are satisfied that they have not been able to solve the knotty problem of "crime" in its various relationships, and they speculate on the subject in the following terms. "Crime, its causes and treatment, has been the subject of much profound and scientific inquiry. Many of the problems it presents are practically at the present time insoluble. It may be true that some criminals are irreclaimable, just as some diseases are incurable, and in such cases it is not unreasonable to acquiesce in the theory that criminality is a disease and the result of physical imperfection; but criminal anthropology as a science is in an embryo stage, and while scientific, and more particularly medical, observation and experience are of the most essential value in guiding opinion on the whole subject, it would be a loss of time to search for a perfect system in learned but conflicting theories when so much can be done by the recognition of the plain fact that *the great majority of prisoners are ordinary men and women, amenable, more or less, to all those influences which affect persons outside.*" We have italicised the last clause because to our mind it contains for all practical

[1] Parts I., II., and III. were published in THE LANCET of May 4th, 18th, and 25th respectively.

purposes the pith of the whole matter. We are not unwilling to accept the compliment honestly paid to the work done by the medical profession in this relation; but we are strongly of opinion that, as the committee imply, it is only in the small minority of imprisoned criminals that the pathological and psychological phenomena are at all likely to take us outside the pale of common sense or beyond the ordinary rules which guide conduct in our everyday life.

The committee ask the question: "Upon what does the reformatory influence which we desire to bring to bear more fully on the prison system depend?" And they answer: (1) the administrative authority; (2) individual effort; and (3) a proper classification of prisoners. We have already dealt with the principles upon which the committee are anxious that the classification of prisoners should be worked out. They are, perhaps, not much more than a development upon existing lines, but we believe them to be sound and not impracticable. On the subject of (1) administrative authority they say: "The population of every prison is a community in itself, changing with greater or less rapidity, but composed of individuals of varying character, aptitude, and history. For purposes of prison discipline it is comparatively easy to mass them all together, to call each of them by a number, and by a cast-iron system to make them all go through the same tasks, observe the same hours, and lead the same lives. But under this orderly equality there exist the most striking inequalities. The hardened criminal bears the discipline without much trouble; others are brutalised by it; others suffer acutely and perhaps are permanently weakened by it in mind and body. ..... It is impossible to administer to each man a relatively exact amount of punishment. But yet it is these very inequalities which often must produce that bitterness and recklessness which lead on to habitual crime. These inequalities must exist under the best available system. But the responsible authorities of the prison should have sufficient time at their command to observe prisoners individually, and sufficient discretionary power to give or obtain for an individual prisoner that guidance, advice, or help which at such a crisis in his life may make a priceless change in his intentions or disposition, and it should be the duty of the central executive to coöperate with the local officials in carrying out satisfactorily this most important part of their functions." They go on to say as to (2) that without an excessive and impossible increase in the number of higher prison officials adequate individual attention to prisoners "could not be given. But the warders could be trained to do some of this work, and under proper rules and regulations outside helpers could be brought in to supplement the work of the prison staff. Ordinary amateurs, as a rule, would be worse than useless. There are, however, many men and women in every centre of population who by training and temperament are amply competent to render valuable assistance." We have no doubt that if the higher prison officials had time to devote to the work they would be able to exercise a beneficial personal influence upon the characters of a sufficient number of prisoners to justify larger efforts in this direction being made, but that such influence could be made to permeate any large proportion of the inmates of a prison is very doubtful. We are far from sanguine about the good results that the committee would lead us to expect from the operative interference of warders, even if they could be "trained," in "awakening the higher susceptibilities of prisoners and developing their moral instincts." The most that could be expected in this direction would be in the selection of warders of an honest, manly, and not unsympathetic cast of mind—men whose manner and example would tacitly impress themselves upon the prisoners with whom they are brought in contact, and whose conversation (when available) would be wholesome and sensible.

The "mark system," which has done so much in convict prisons to stimulate industry and good conduct, is said to "work well." The committee were given to understand that it is the practice to restore marks forfeited by inadvertence or some trivial offence subsequently compensated for by diligence and good conduct, and they commend the practice. They are also of opinion that prisoners should not forfeit marks by reason of physical or mental weakness or illness. "We considered," they say, "whether the power to earn remission of sentence should be extended from convict to local prisons. It is difficult to see the logic or the advantage of allowing a three-year convict to earn a remission of one-fourth of his sentence, and of forbidding a local prisoner sentenced for eighteen months or two years to earn any remission. We suggest that the remission system might be extended to local prisoners sentenced to the longer periods." Some difficulty—not a very great one, it is true—might arise in altering the apportioned length of sentences which, but for the length, are to be regarded as in all respects identical. But apart from this, when the length of sentence comes to be reckoned in years, and not months, there can be no doubt that the longer the sentence the greater is the intensity of that weariness of heart which the "long vista of years" may produce, and which almost demands the introduction of some bright element of hope such as that of which the mark system is the embodiment.

PORTSMOUTH MEDICAL UNION.

WE append the prospectus of this new association, whose objects are thereby sufficiently defined, and we wish it all good fortune in safeguarding the interests of the profession, promoting good fellowship and an intimate *entente cordiale* between the medical men of the neighbourhood, and in securing for them the strength that is given by union.

The positive necessity for some organised action by practitioners for protection against unfairness and encroachment has become very urgent. No one who has read the recent correspondence in our columns on this subject, or who is conversant with the whole story of the battle of the clubs at Cork, can doubt that the profession often nowadays finds itself placed where opposition to grave abuses, so far from being evidence of cantankerousness or greed, is the only course that is left to the self-respecting man who sets a proper value upon his services.

GENERAL OBJECTS.

1. To safeguard and support the interests of the medical profession in the town and district.
2. To encourage cordial relations and amicable feelings between medical men practising in the district.
3. To enable members to obtain the advice and united support of the local profession.
4. To give opportunities of discussion and interchange of views on the business side of medical practice.
5. To obtain the combined action and consolidated influence of members of the union upon points of difficulty which may arise from time to time in local practice.

PARTICULAR OBJECTS.

1. To consider and take action upon the relations of medical officers with friendly societies and medical aid associations, and with regard to Poor-law and other official appointments.
2. To establish, maintain, and circulate among members of the union a patients' black list.
3. To promote the improvement of medical fees.

OBJECTS WITH REGARD TO FRIENDLY SOCIETIES.

1. To obtain the united action of members to enforce a wage limit.
2. To enforce payment for certificates by members of the club who do not subscribe to the surgeon's fund, and for all certificates not belonging to the club.
3. To enforce requirement of medical examination of new members and an examining fee.
4. To raise the rate of subscriptions for juveniles.
5. To alter the tenure of office to a suggested three months' notice on either side.
6. To refuse the admission to medical benefits of visiting members except after satisfactory medical examination.
7. To obtain the united action of members of the union with regard to the admission of females to the medical benefits of friendly societies.

PROPOSED RULES.

1. The society shall be called the Portsmouth Medical Union, having for its chief object to safeguard and support the interests of the medical practitioners in the town and district.
2. Every registered medical practitioner shall be eligible for membership.
3. Each member shall pay an annual subscription of 5s., due on June 1st in each year.
4. The affairs of the union shall be governed by a president, two vice-presidents, hon. secretary and treasurer, and a committee of six members, the above officers being *ex-officio* members of the committee. At committee meetings four shall form a quorum.
5. All officers, including the committee, shall be elected at the annual meeting to be held in the month of June in each year.
6. The committee shall have power to fill up vacancies in their own body.
7. The committee shall meet once a month, or when convened by the hon. secretary, to consider applications for advice or assistance, but may call a general meeting at any time if considered necessary.
8. A special general meeting shall be called by the president at any time upon a requisition signed by six members, such special meeting to consider no other topic than that for which the meeting was called.
9. Every member of the union shall give a personal pledge not to oppose any practitioner in any course of action which he may take in his official capacity concerning any public appointment with the concurrence of the committee.
10. Any member acting, in the opinion of a special meeting called for

the purpose, contrary to the laws and regulations of the union shall, upon a majority of at least three-fourths of the members present, be suspended or expelled (and without appeal) from the advantages of the union.

11. A special meeting called for the purpose of considering the conduct of any member of the union shall only be convened after fourteen days' written notice has been sent to the last known address of each member, and such notice shall state clearly the purpose for which such meeting is convened.

12. No new law shall be adopted, and no existing law be altered or rescinded, except at the annual general meeting, or at a special meeting called for the purpose, and fourteen days' notice of such proposed alterations, signed by at least three members, shall be sent to every member of the union in the circular convening the meeting.

The officers of the Portsmouth Medical Union are as follows:—President: Mr. F. Lord. Vice-Presidents: Mr. James Green and Dr. Lysander Maybury. Committee: Mr. Goss, Mr. Kyffin, Mr. Hackman, Mr. Colt, Mr. Emmett, and Mr. McGregor. Hon. Secs. and Treasurer: Dr. Frederick Pearse, Dr. J. Blackman (and Treasurer).

The temporary address is 5, Pembroke-road, Portsmouth.

CAMBRIDGE SUMMER SCHOOL OF MEDICINE.

A SHORT time ago we published a provisional notice of the Cambridge Summer School of Medicine. We have now received a detailed programme of the proceedings as far as they are at present arranged. The subjects for laboratory demonstration have not yet been settled, nor have those for the hospital cliniques, but special notices will be issued later, together with more definite information.

The session will commence on Monday, July 1st, and will open with a conversazione in the Physiological Laboratory and with an address by Sir George Humphry. At 10.15 on Tuesday, Wednesday, and Thursday mornings clinical lectures will be delivered in Addenbrooke's Hospital by members of the staff; on Friday a pharmacological demonstration will be given in the Physiological Laboratory. At 10.30 all through the week physiological, alternating with pathological, demonstrations will be given. The rest of the time will be occupied with various lectures and addresses, garden parties, visits to colleges, organ recitals, &c.

It is to be hoped that the profession will take advantage of the offer so generously made by the Cambridge Medical School, an offer which shows University Extension in its best aspect, for apart from the professional knowledge to be gained there can be no more delightful place in which to spend a week of summer weather than Cambridge, unless, indeed, it be Oxford. We hope the day is not far distant when Oxford will offer the same combination of intellectual and physical pleasures that her sister University is offering to those who have never tasted the pleasures of university life.

MEDICO-PSYCHOLOGICAL ASSOCIATION OF GREAT BRITAIN AND IRELAND.

A GENERAL MEETING of this association was held at 11, Chandos-street, Cavendish-square, on Thursday, May 16th, under the presidency of Mr. Conolly Norman, F.R.C.P. Irel.

The President proposed the following resolution: "That this association assembled in general meeting desire to express their deep sense of the loss which the association has sustained in the death of Dr. Daniel Hack Tuke." This was seconded by Dr. Blandford, supported by Dr. Rayner, and carried unanimously, and the honorary general secretary was requested to send a copy of it to Mrs. Tuke.

Dr. Mercier then read a paper on Collective Investigation. He referred to the Collective Investigation Committee of the British Medical Association, and said that although the results of its labours did not equal the sanguine anticipations of its promoters, yet they were by no means fruitless or unimportant. This association had advantages and opportunities for collective investigation that were vastly superior to those of the British Medical Association, for their members had their patients under constant observation, and had the regulation of the whole life of their patients. Dr. Mercier then took as an example the subject of epilepsy, giving a number of instances of questions that were awaiting solution, and claimed that they could be solved by the method of collective investigation, and by that method only. He concluded by moving that a committee should be appointed to deal with the matter and that members should be invited to coöperate.

Dr. Andriezen had arranged to read a paper on Insomnia and Cephalalgia and their Correlated Brain Changes in Early Alcoholic Insanity, but at the last moment a telegram arrived saying that he was too unwell to be present. After the meeting the members dined together at the Café Royal.

THE EXTENSION OF THE WEST LONDON HOSPITAL.

THE Duke of Devonshire presided on Wednesday afternoon last at a meeting at Devonshire House in aid of the proposed building fund of £20,000 for the extension of the West London Hospital. Among those present were H.R.H. the Princess Louise, the Marquis of Lorne, Cardinal Vaughan, Sir A. Borthwick, M.P., Mr. Hayes Fisher, M.P., Sir William Priestley, M.D., Mr. Leopold de Rothschild, and the Rev. the Hon. E. Carr Glyn, the rector of Kensington.

His GRACE, in opening the proceedings, expressed his regret at the unavoidable absence of Mr. Arthur Balfour, whose powers of eloquence, however, he thought could not have added greatly to the force of the bare facts. He then detailed the population of the districts served by the hospital, pointing out that hospital accommodation sufficient for 218,000 persons—the number resident in the neighbourhood when the buildings were first planned—was clearly inadequate for 460,000, the present population.

The Marquis of LORNE moved: "That, recognising the great importance of the work of the West London Hospital to the community in the West London district, this meeting cordially recommends it to the sympathy and support of the benevolent on the ground that it performs a most useful work in an efficient and economical manner."

The resolution was seconded by Cardinal VAUGHAN, supported by Sir ALGERNON BORTHWICK, and carried unanimously.

Mr. HAYES FISHER moved the next resolution in place of Mr. Balfour: "That, having heard of the necessity of enlarging the West London Hospital, this meeting cordially approves the action of the board of management in proceeding with the erection of the proposed extension, and engages itself to support the undertaking by every means in its power."

Sir WILLIAM PRIESTLEY seconded the resolution.

Mr. STEPHEN PAGET, a member of the staff of the hospital, supported it, and explained the variety of the cases dealt with.

The resolution was unanimously carried.

The meeting concluded with a vote of thanks to the Duke and Duchess of Devonshire, moved by the Rev. the Hon. E. CARR GLYN, and seconded by Mr. L. ROTHSCHILD.

It was announced that subscriptions had been given or promised amounting to £1095.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN thirty-three of the largest English towns 5435 births and 3139 deaths were registered during the week ending June 8th. The annual rate of mortality in these towns, which had declined in the four preceding weeks from 17·7 to 17·2 per 1000, further fell last week to 15·5. In London the rate was 14·8 per 1000, while it averaged 15·9 in the thirty-two provincial towns. The lowest rates in these towns were 10·4 in Portsmouth, 11·3 in Croydon, 11·4 in Derby, 11·7 in Bradford, and 12·7 in Nottingham; the highest rates were 20·0 in Blackburn, 20·3 in Salford, 20·9 in Liverpool, 21·4 in Bolton, and 25·7 in Burnley. The 3139 deaths included 294 which were referred to the principal zymotic diseases, against 354 and 348 in the two preceding weeks; of these, 72 resulted from measles, 59 from diarrhœa, 51 from diphtheria, 51 from whooping-cough, 33 from scarlet fever, 26 from "fever" (principally enteric), and 2 from small-pox. No fatal case of any of these diseases occurred last

week in Croydon or in Halifax; in the other towns they caused the lowest death-rates in Sheffield, Newcastle-upon-Tyne, Leeds, and Sunderland, and the highest rates in Gateshead, West Ham, Plymouth, Salford, and Bolton. The greatest mortality from measles occurred in West Ham, Plymouth, and Bolton; from whooping-cough in Gateshead; and from "fever" in Burnley. The mortality from scarlet fever showed no marked excess in any of the large towns. The 51 deaths from diphtheria included 33 in London, 4 in Birmingham, 3 in West Ham, and 3 in Wolverhampton. One fatal case of small-pox was registered in Bolton and one in Oldham, but not one in London or in any other of the thirty-three large towns. There were 23 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 8th inst., against 27, 29, and 22 at the end of the three preceding weeks; 5 new cases were admitted during the week, against 4, 7, and 1 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 1589, against 1446, 1503, and 1524 on the three preceding Saturdays; 179 new cases were admitted during the week, against 185, 214, and 187 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 245 and 193 in the two preceding weeks, further declined to 163 last week, and were 96 below the corrected average. The causes of 50, or 1·6 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Nottingham, Bradford, Newcastle-upon-Tyne, and in sixteen other smaller towns; the largest proportions of uncertified deaths were registered in Birmingham, Huddersfield, Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 20·2 and 21·4 per 1000 in the two preceding weeks, declined again to 19·7 during the week ending June 8th, but was 4·4 per 1000 above the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 15·7 in Leith and 16·3 in Aberdeen to 21 8 in Greenock and 24·0 in Perth. The 567 deaths in these towns included 25 which were referred to diarrhœa, 12 to measles, 11 to whooping-cough, 4 to scarlet fever, 4 to "fever," 1 to diphtheria, and not one to small-pox. In all, 57 deaths resulted from these principal zymotic diseases, against 64 and 60 in the two preceding weeks. These 57 deaths were equal to an annual rate of 2·0 per 1000, which was 0 6 above the mean rate last week from the same diseases in the thirty-three large English towns. The 25 fatal cases of diarrhœa exceeded the number recorded in recent weeks, and included 11 in Glasgow, 4 in Edinburgh, and 4 in Paisley. The deaths referred to measles, which had declined from 30 to 12 in the four preceding weeks, were again 12 last week, of which 4 occurred in Glasgow and 3 in Greenock. The fatal cases of whooping-cough, which had been 17 in each of the two preceding weeks, declined to 11 last week, and included 6 in Glasgow. The deaths referred to different forms of "fever," which had been 5, 3, and 6 in the three preceding weeks, were 4 last week, of which 2 occurred in Glasgow, where 3 of the 4 fatal cases of scarlet fever were also recorded. The deaths from diseases of the respiratory organs in these towns, which had been 103 and 118 in the two preceding weeks, were 112 last week, and slightly exceeded the number in the corresponding week of last year. The causes of 30, or more than 5 per cent., of the deaths in these eight towns were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 28·5 and 26 7 per 1000 in the two preceding weeks, further declined to 22·1 during the week ending June 8th, a lower rate than has been recorded in any week since November last. During the past ten weeks of the current quarter the death-rate in the city has averaged 28·9 per 1000, the rate during the same period being 17·1 in London and 19·1 in Edinburgh. The 148 deaths registered in Dublin during the week under notice showed a decline of 31 from the number in the preceding week, and included 11 which were referred to the principal zymotic diseases, against numbers increasing from 5 to 9 in the three preceding weeks; of these, 4 resulted from diarrhœa, 3 from small-pox, 2 from whooping-cough, 2 from "fever," and not one either from measles, scarlet fever, or diphtheria. These 11 deaths were equal to an annual rate of 1·6 per 1000, the zymotic death-rate during the same period being 1·6 in London and 1·3 in Edinburgh. The fatal cases of small-pox, which had been 2 in each of the two preceding weeks, rose to 3 last week. The 4 deaths referred to diarrhœa showed a further increase upon the numbers recorded in recent weeks. The mortality from whooping-cough and from "fever" also exceeded that recorded in the preceding week. The 148 deaths registered in Dublin last week included 25 of infants under one year of age and 35 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showed a further decline from the numbers recorded in recent weeks. Twelve inquest cases and 4 deaths from violence were registered; and 51, or more than a third, of the deaths occurred in public institutions. The causes of 13, or nearly 9 per cent., of the deaths in the city last week were not certified.

SANITATION IN NEW JERSEY, U.S.A.

The State Board of Health of New Jersey, U.S.A., has since the publication of its seventeenth annual report suffered a loss which must, we fear, seriously affect its future. In the death of Dr. Ezra M. Hunt, the former secretary to the board, there has been removed the hand which to a large extent was instrumental in forming the board itself and which has in no small degree shaped its destinies from the date of its foundation eighteen years ago to the present time. The eighteenth annual report of the board, which is now before us, contains, side by side with the "In Memoriam," three able articles from his pen, one on Recent Sanitary Progress, another on Thoughts for Sanitary Workers, and the third an introduction to the Sixteenth Report of the Bureau of Vital Statistics. In the first of these articles Dr. Hunt refers largely to the recent contributions of English workers in sanitary science and to the reports of our Royal Commissions; and in dealing with the subject of cholera he remarks that the last International Conference in Paris "showed that no longer will we wait for this marauding pestilence to start forth on its sad mission; but that it, or the causes that produce it, will be attacked at the starting points, and thus our dealings with it will be far more radical and successful." Governments, he states, "are beginning to erect monuments or bestow other honours on their sanitary officers, and what was once patronised as a philanthropy is now held to be a necessary department of political economy, to be legislated for in the interests of the masses and for the welfare of all citizens." Dr. Hunt's executive duties have now fallen upon the shoulders of Dr. Henry Mitchell, who, in his secretarial report, deals in the main with administrative questions. He points out that one of the most useful functions of the central health authority is the investigation of epidemic outbreaks. Frequently, he observes, the source of infection is situated outside the jurisdiction of the local board in whose district the outbreak is chiefly manifesting itself. The present laws of the State, however, though they impose upon the State Board the duty of making such investigations, make no provision for the notification of outbreaks of infectious disease by the local boards. The effect of this is that the information with regard to the outbreak is often received in a casual manner and at a time when the difficulty of tracing its origin is very materially increased. The necessity for State interference has, Dr. Mitchell reports, been well illustrated during the year under review, when investigations into ten outbreaks revealed the fact that only in two instances were the local boards capable of dealing in any adequate degree with the epidemic; they could neither protect the neighbouring portion of the State nor their own citizens. The inquiries referred to have conclusively shown the urgent need for instant official notification from local boards to the State Board of Health. The difficulty of arranging the sanitary administration of large summer resorts is drawn attention to by Dr. Mitchell, and as an instance of this he mentions Jersey City, which in January has a population of some 200 000 and in July one of over a million; such sudden and extreme changes in population present most serious questions in relation to water-supply, sewerage, and scavenging. Among the epidemic outbreaks which took place in New Jersey in 1894, a subject dealt with by Dr. Clark

Hunt, we note two of enteric fever apparently due to the consumption of infected milk. In a paper on Diphtheria contributed by Dr. Daniel Strock a statement is made that "a well in proximity to a cesspool that receives the expectorated matter from a patient must be a menace to those who partake of its waters; and water-supplies that receive the sewage of cities and towns where the disease prevails are no doubt active factors in distributing the bacillus." This opinion will, we expect, hardly be accepted by English sanitarians, as no well-authenticated instance of the dissemination of diphtheria from polluted water has, as far as we are aware, been recorded in this country. Dr. Henry Coit contributes to the New Jersey report a very original and interesting paper on the Causation of Disease by Milk, in the introduction to which he remarks: "In the days of the Roman Empire it was the custom to accord to the noble infant civilian, with respect to his food, that which was his birthright; and the fabled and exceptional relation of Romulus and Remus to a lower mammal was the work of tradition. ..... Two thousand years later this order is well-nigh reversed, and we sit in quiet complaisance and realise that as a result of the disastrous effect of civilisation upon human life a large and growing proportion of our race must needs be nourished by a domesticated lower mammal of the bovine species." From the report of the vital statistics for New Jersey we learn that among the counties of the State the general death-rate per 1000 for the year ended June 30th, 1894, ranged from 12·21 to 24·47, the total death-rate for the counties being 19·09. Among the cities of the State having populations above 5000 the rates range from 9·88 to 28·47.

PUBLIC HEALTH IN HONG-KONG.

The annual report of Colonial-Surgeon P. B. C. Ayres, C.M.G., on the work performed during 1893 in the different establishments in Hong-Kong under his supervision is an interesting volume, though a somewhat heterogeneous collection of matter, embracing as it does the reports of the Superintendent of the Government Civil Hospital and of the epidemic hulk *Hygeia*, as also those of the medical officer in charge of the gaol, the Superintendent of the Vaccine Institute, and the Government analyst. The report now before us has, the Colonial Surgeon observes, been delayed owing to the outbreak of plague, which, as we can well believe, taxed severely the energies of the administrative department. In reference to the operations of the Lock Hospital, Mr. Ayres reports that the return now submitted is the last he will be called upon to make owing to the fact that the Secretary of State has abolished the medical examination of women. For the last six years these examinations have been voluntary, and they seem to have been most highly appreciated by the women concerned, so much so, indeed, that at their request Mr. Ayres wrote to the Government pointing out that the women themselves had learned to value the benefits of examination and that they requested its continuance. This request, however, having been refused, the women suggested to the hospital nurse that if she would leave Government employ they would pay her a better salary and furnish a hospital containing rooms for her own private use, and they also proposed to the Colonial Surgeon that he should act as medical examiner. This certainly is very high testimony to the value of examination, and we can but offer our congratulations to the Colonial Surgeon on the tact with which the examinations and general control of the work must have been carried out. The institution has been carried on, Mr. Ayres observes, since 1858, twenty eight years under the Contagious Diseases Ordinance and six as a voluntarily attended venereal hospital for women. The Justices of the Peace have visited the hospital once a week and on no single occasion has a complaint been made. It seems hard, Mr. Ayres points out, that the wishes of the women should not be complied with and that after forcing attendance upon them for twenty-eight years voluntary examination should be denied them; he regards it as a serious blow to the health of the colony. The Government analyst, Mr. Crow, has presented a report upon the practice among the Chinese community of injecting morphia hypodermically. It appears that some Chinamen came into hospital covered with innumerable puncture scars, and upon inquiry it was found that many small shopkeepers were administering hypodermic injections of morphia with the ostensible object of curing opium eating. The analyst procured samples of the solution used for injection and ascertained that at each injection half a grain of hydrochlorate of morphia was used. Commencing with two injections per diem, the number was subsequently increased to four or five. We are glad to hear that an ordinance putting a stop to this practice was quickly passed. The Colonial Surgeon's report contains the answers furnished by the several officers at Hong-Kong to the queries presented to them by the Royal Commission on Opium. Dr. J. M. Atkinson, who for the last six years has acted as superintendent of the Government Civil Hospital, states that, as a result of his experience, he has arrived at the conclusion that neither opium nor alcohol when consumed by the Chinese and other native races in moderation is injurious. In answer to the query as to what would be the effect of cutting off the supply of Indian opium, the officials appear to be unanimously of opinion that supplies would be forthcoming from other sources. The Colonial Surgeon, for instance, observes: "Cut down the Indian opium so that it becomes unprocurable in China and too expensive in India, and China will grow opium sufficient for all eastern nations and Europe too if it can make a profit on it." In dealing with sanitation in Hong-Kong Mr. Ayres, after tracing the history of the colony in this matter since his arrival there in 1893, remarks "that many opportunities have been lost, notably after the great fire of 1872, when, to his disgust, the Colonial Surgeon saw the same old insanitary Chinese houses rebuilt more crowded than ever. ..... At the moment of writing the terrible visitation of the plague has given the colony a very severe lesson, and a great opportunity, and there are hopes that the colony may become in the near future a model English settlement."

VITAL STATISTICS OF LONDON DURING MAY, 1895.

IN the accompanying table will be found summarised complete statistics relating to sickness and mortality during May in each of the forty-three sanitary areas of London. With regard to the notified cases of infectious disease in the metropolis during last month, it appears that the number of persons reported to be suffering from one or other of the nine diseases specified in the table was equal to 6·8 per 1000 of the population, estimated at 4,392,346 persons in the middle of the current year. In the three preceding months the rates had been 5·9, 5·8, and 5·7 per 1000 respectively. Among the various sanitary areas the rates were considerably below the average in St. James Westminster, St. Martin-in-the-Fields, Strand, St. Luke, City of London, St. Saviour Southwark, and St. George Southwark; while they showed the largest excess in St. George-in-the-East, Limehouse, Poplar, Rotherhithe, Greenwich, Woolwich, and Plumstead. The prevalence of small-pox in London showed a further decline in May, 31 cases being notified during the month, including 8 in Lambeth, 6 in Rotherhithe, and 4 in Lee sanitary areas. The Metropolitan Asylum Hospitals contained 20 small-pox patients at the end of May, against 66, 54, and 34 at the end of the three preceding months; the weekly admissions averaged 5, against 15, 11, and 7 in the three preceding months. The prevalence of scarlet fever in London showed an increase upon that recorded in the preceding month; this disease was proportionally most prevalent in Chelsea, Stoke Newington, St. George-in-the-East, Bermondsey, Rotherhithe, Lambeth, Greenwich, Woolwich, Lee, and Plumstead sanitary areas. The Metropolitan Asylum Hospitals contained 1481 scarlet fever patients at the end of May, against 1569, 1485, and 1413 at the end of the three preceding months; the weekly admissions averaged 167, against 141, 145, and 132 in the three preceding months. The prevalence of diphtheria in London showed a further increase during May; among the various sanitary areas this disease showed the highest proportional prevalence in Whitechapel, St. George-in-the-East, Limehouse, Poplar, Rotherhithe, and Camberwell. There were 503 cases of diphtheria under treatment in the Metropolitan Asylum hospitals at the end of May, against 461, 435, and 430 at the end of the three preceding months; the weekly admissions averaged 81, against 50, 62, and 69 in the three preceding months. The prevalence of enteric fever in London showed a marked increase during the month under notice, owing principally to a severe outbreak in Plumstead; among the other sanitary areas of the Metropolis this disease showed the highest proportional prevalence in St. George Hanover-square, Clerkenwell, Greenwich, and Woolwich. Erysipelas was proportionally most prevalent in Kensington, Marylebone, St. Pancras, Bethnal-green, and Rotherhithe sanitary areas. The

MONTHLY ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON—MAY, 1895.

(Specially compiled for THE LANCET.)

SANITARY AREAS.	Estimated population in the middle of 1895.	NOTIFIED CASES OF INFECTIOUS DISEASE.										DEATHS FROM PRINCIPAL INFECTIOUS DISEASES.										Deaths from all causes.	Death-rate per 1000 living.	Deaths of infants under one year to 1000 births.
		Small-pox.	Scarlet fever.	Diphtheria.*	Typhus fever.	Enteric fever.	Other continued fevers.	Puerperal fever.	Erysipelas.	Cholera.	Total.	Annual rate per 1000 persons living.	Small-pox.	Measles.	Scarlet fever.	Diphtheria.†	Whooping-cough.	Typhus fever.	Enteric fever.	Other continued fevers.	Diarrhœa.	Total.	Annual rate per 1000 persons living.			
LONDON	4,392,346	31	1236	813	1	310	9	29	411	—	2850	6·8	1	194	64	183	169	—	35	1	83	730	1·7	6680	15·9	119
West Districts.																										
Paddington	122,756	—	23	31	—	4	—	—	7	—	65	5·5	—	—	2	4	—	—	3	—	4	13	1·1	168	14·3	129
Kensington	167,671	2	33	26	—	4	—	—	24	—	89	5·5	—	3	3	6	3	—	—	—	5	20	1·2	216	13·4	123
Hammersmith	106,429	2	23	20	—	2	—	1	11	—	59	5·7	—	—	2	—	5	—	—	—	2	9	0·9	136	13·1	118
Fulham	117,745	—	21	16	—	3	—	—	9	—	49	4·3	—	1	2	3	6	—	1	—	6	19	1·7	153	13·6	131
Chelsea	99,930	—	38	22	—	3	—	—	8	—	71	7·4	—	—	1	4	4	—	—	—	2	11	1·1	160	16·7	135
St. George Hanover-square	74,037	—	22	10	—	7	—	—	3	—	42	5·9	—	1	—	5	2	—	—	—	1	9	1·3	96	13·5	95
Westminster	54,003	—	9	8	—	2	—	1	1	—	21	4·1	—	—	—	3	—	—	—	—	—	3	0·6	78	15·1	127
St. James Westminster	23,149	—	2	4	—	1	—	—	—	—	7	3·2	—	—	1	—	3	—	—	—	—	4	1·8	29	13·1	45
North Districts.																										
Marylebone	137,392	—	34	10	—	4	1	—	19	—	68	5·2	—	2	1	2	4	—	2	—	5	16	1·2	243	18·4	115
Hampstead	77,992	—	14	9	—	3	—	1	6	—	33	4·4	—	—	—	2	1	—	1	—	—	4	0·5	78	10·5	66
St. Pancras	233,543	—	63	31	—	7	2	1	30	—	134	6·0	—	5	3	7	11	—	1	—	3	30	1·3	346	15·5	109
Islington	335,929	2	73	39	—	2	—	2	23	—	141	4·4	—	12	6	9	9	—	—	—	3	39	1·2	458	14·2	121
Stoke Newington	35,234	—	15	8	—	2	—	—	1	—	26	7·7	—	2	—	1	—	—	—	—	1	4	1·2	37	10·9	104
Hackney	215,623	1	61	40	—	11	—	2	18	—	133	6·4	—	9	4	4	4	—	—	—	3	24	1·2	288	13·9	101
Central Districts.																										
St. Giles	37,654	—	5	7	—	2	—	—	2	—	16	4·4	—	—	—	1	1	—	—	—	—	2	0·6	70	19·4	113
St. Martin-in-the-Fields	13,526	—	2	2	—	—	—	—	—	—	4	3·1	—	—	—	—	—	—	—	—	—	—	—	19	14·6	50
Strand	22,586	—	3	4	—	1	—	—	—	—	8	3·7	—	—	—	1	—	—	—	—	—	1	0·5	44	20·3	145
Holborn	32,188	2	4	4	—	—	—	1	3	—	14	4·5	—	—	—	2	1	—	—	—	1	4	1·3	58	18·8	97
Clerkenwell	65,036	2	20	11	—	5	—	1	6	—	45	7·2	—	2	1	2	2	—	2	—	—	9	1·4	90	14·4	101
St. Luke	40,763	—	3	4	—	1	—	—	5	—	13	3·3	—	—	—	2	3	—	—	—	—	5	1·2	73	18·7	99
City of London	35,824	—	6	3	—	1	—	1	1	—	12	3·7	—	2	2	2	—	—	1	—	—	7	2·2	53	16·3	154
East Districts.																										
Shoreditch	122,932	—	43	27	—	4	—	1	16	—	91	7·7	—	16	—	4	10	—	—	—	4	34	2·9	223	18·9	131
Bethnal Green	130,061	1	28	29	—	6	—	1	22	—	87	7·0	—	5	—	8	—	—	—	—	2	15	1·2	202	16·2	83
Whitechapel	75,820	—	22	30	1	2	—	—	5	—	60	8·3	—	13	1	7	3	—	—	—	—	24	3·3	129	17·7	67
St. George-in-the-East	45,227	—	25	22	—	1	—	—	3	—	51	11·8	—	16	4	3	4	—	2	—	3	32	7·4	128	29·5	156
Limehouse	56,885	—	19	18	—	4	—	1	5	—	47	8·6	—	10	6	8	10	—	—	—	2	36	6·6	146	26·8	208
Mile End Old Town	108,443	—	24	29	—	5	—	—	11	—	69	6·6	—	17	1	8	5	—	1	—	2	34	3·3	189	18·2	107
Poplar	171,230	—	40	63	—	8	—	2	22	—	135	8·2	—	39	4	13	12	—	1	—	2	71	4·3	331	20·2	154
South Districts.																										
St. Saviour Southwark	26,570	—	—	5	—	—	—	—	2	—	7	2·7	—	—	—	—	4	—	—	—	1	5	2·0	51	20·0	186
St. George Southwark	60,168	—	9	1	—	4	—	—	4	—	18	3·1	—	2	—	—	8	—	—	—	1	11	1·9	120	20·8	136
Newington	119,358	—	33	16	—	6	1	—	6	—	62	5·4	—	1	2	7	9	—	3	1	3	26	2·3	235	20·5	167
St. Olave Southwark	13,065	—	2	1	—	—	—	1	1	—	5	4·0	—	—	—	—	1	—	—	—	—	1	0·8	23	18·5	153
Bermondsey	83,861	—	35	13	—	4	—	1	7	—	60	7·5	—	—	1	2	7	—	—	—	4	14	1·7	144	17·9	156
Rotherhithe	40,713	6	27	24	—	1	—	—	12	—	70	17·9	1	3	3	11	—	—	1	—	—	19	4·9	81	20·8	121
Lambeth	264,883	8	105	47	—	13	3	3	33	—	212	7·8	—	13	3	7	15	—	—	—	9	47	1·7	454	16·6	125
Battersea	165,130	—	64	22	—	7	1	—	17	—	101	6·4	—	14	1	4	3	—	1	—	3	26	1·6	232	14·7	125
Wandsworth	185,956	—	62	19	—	7	1	1	17	—	107	6·0	—	1	1	4	1	—	2	—	2	11	0·6	178	10·0	87
Camberwell	252,737	—	57	78	—	6	—	2	26	—	169	7·0	—	—	4	18	10	—	1	—	3	36	1·5	385	15·9	118
Greenwich	175,163	1	90	42	—	13	—	1	8	—	155	9·2	—	2	3	14	6	—	2	—	4	31	1·8	260	15·5	92
Lewisham (excluding Penge)	82,410	—	18	5	—	2	—	—	5	—	30	3·8	—	3	—	—	2	—	—	—	1	6	0·8	82	10·4	100
Woolwich	42,768	—	20	8	—	16	—	—	3	—	47	11·5	—	—	—	1	—	—	1	—	1	3	0·7	61	14·9	182
Lee	38,532	4	15	—	—	—	—	2	3	—	24	6·4	—	—	2	—	—	—	—	—	—	2	0·5	47	12·6	143
Plumstead	61,494	—	34	14	—	136	—	2	6	—	192	32·6	—	—	—	4	—	—	9	—	—	13	2·2	86	14·6	96
Port of London	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Including 37 cases of membranous croup.

† Including deaths from membranous croup.

29 cases of puerperal fever notified during May included 3 in Lambeth and 2 each in Islington, Hackney, Poplar, Camberwell, Lee, and Plumstead sanitary areas.

The mortality statistics in the accompanying table relate to the deaths of persons actually belonging to the various metropolitan sanitary areas, the deaths occurring in the institutions of London having been distributed among the different sanitary areas in which the patients had previously resided. During the five weeks ending Saturday, June 1st, the deaths of 6680 persons belonging to London were registered, equal to an annual rate of 15·9 per 1000 of the population, against 30·3, 30·0, and 18·3 in the three preceding months. The lowest death-rates during May in the various sanitary areas were 10·0 in Wandsworth, 10·4 in Lewisham (excluding Penge), 10·5 in Hampstead, 10·9 in Stoke Newington, 12·6 in Lee, and 13·1 in Hammersmith; the highest rates were 20·2 in Poplar, 20·3 in Strand, 20·5 in Newington, 20·8 in St. George Southwark and in Rotherhithe, 26·8 in Limehouse, and 29·5 in St. George-in-the-East. During the five weeks of May 730 deaths were referred to the principal zymotic diseases in London; of these, 194 resulted from measles, 183 from diphtheria, 169 from whooping-cough, 83 from diarrhœa, 64 from scarlet fever, 35 from enteric fever, 1 from ill-defined fever, and 1 from small-pox. These 730 deaths were equal to an annual rate of 1·7 per 1000, against 1·5 in each of the three preceding months. No fatal case of any of these diseases was registered during May in St. Martin-in-the-Fields; in the other sanitary areas the lowest zymotic death-rates were recorded in Westminster, Hampstead, St. Giles, Strand, Wandsworth, and Lee, and the highest rates in Whitechapel, St. George-in-the-East, Limehouse, Mile End Old Town, Poplar, and Rotherhithe. Only one fatal case of small-pox was registered in London during the month under notice, the corrected average in the corresponding periods of the ten preceding years being 29; this fatal case belonged to Rotherhithe sanitary area. The 194 deaths referred to measles were less than half the corrected average number; among the various sanitary areas this disease showed the highest proportional fatality in Shoreditch, Whitechapel, St. George-in-the-East, Limehouse, Mile End Old Town, and Poplar. The 64 fatal cases of scarlet fever were 16 below the corrected average number; this disease showed the highest proportional fatality in St. George-in-the-East, Limehouse, and Rotherhithe sanitary areas. The 183 deaths referred to diphtheria exceeded by 43 the corrected average number; among the various sanitary areas this disease showed the highest proportional fatality in Whitechapel, Limehouse, Mile End Old Town, Poplar, Rotherhithe, and Greenwich. The 169 fatal cases of whooping-cough were 136 below the corrected average number; this disease showed the highest proportional fatality in St. James Westminster, Shoreditch, St. George-in-the-East, Limehouse, St. George Southwark, and Bermondsey sanitary areas. The 35 deaths referred to enteric fever were 13 below the corrected average number; except in Plumstead, where this disease was epidemic during the month under notice, there was no marked excess of "fever" mortality in any of the sanitary areas of London. The 83 fatal cases of diarrhœa slightly exceeded the corrected average number. In conclusion, it may be stated that the mortality in London during May from these principal zymotic diseases was as much as 31 per cent. below the average.

Infant mortality in London during May, measured by the proportion of deaths under one year of age to registered births, was equal to 119 per 1000, and was below the average. Among the various sanitary areas the lowest rates of infant mortality were recorded in St. James Westminster, Hampstead, St. Martin-in-the-Fields, Bethnal Green, and Whitechapel; and the highest rates in St. George-in-the-East, Limehouse, St. Saviour Southwark, Newington, Bermondsey, and Woolwich.

THE SERVICES.

MOVEMENTS OF THE MEDICAL STAFF.

SURGEON-COLONEL O'DWYER has arrived at Halifax and taken over the duties of Principal Medical Officer from Surgeon-Colonel Archer. Brigade-Surgeon-Lieutenant-Colonel Clapp, retired pay, has been appointed to the Medical Charge at Pontefract. Surgeon-Captain Clarkson has been appointed to the Medical Charge of the Women's and Children's Hospital at Aldershot, in succession to Surgeon-Major Deane, whose term has expired. Surgeon-Major Irvine has arrived in England on leave from Gibraltar, and Surgeon-Captain Maher from the West Coast of Africa on completion of a tour of service. Surgeon-Captain Hale has been transferred from the Eastern to the Western District, and Surgeon-Lieutenant Dove from Woolwich to the Home District.

ARMY MEDICAL STAFF.

Surgeon-Lieutenant-Colonel Alfred Henry Anthoniez, M.B., to be Brigade-Surgeon-Lieutenant-Colonel, vice P. Le Feuvre Kilroy, retired.

INDIA AND THE INDIAN MEDICAL SERVICES.

The following appointments are announced:—Surgeon-Captain J. B. Jameson to the Medical Charge of the 28th Bombay Infantry; Surgeon-Major W. B. Browning to be Surgeon, Second District, Madras; Surgeon-Major F. C. Reeves to be District Medical and Sanitary Officer and Superintendent of Gaol, Madura; Surgeon-Captain H. S. Peake, A.M.S., to be Staff Surgeon, Murree; Surgeon-Major J. Anderson, Civil Surgeon, Bareilly, to hold Charge of the Central Prison, Bareilly, in addition to his other duties, until further orders; Surgeon-Captain H. E. Drake-Brockman (Bengal), on military duty, Nowgong, to the Medical Charge of the Bundelkhand Political Agency, in addition to his military duties, until further orders; Surgeon-Lieutenant Hamilton, doing temporary duty at the Native Hospital, Cawnpore, proceeds to Manipur, in the Assam District, for duty; the services of Surgeon-Lieutenant W. Young (Bengal) are placed temporarily at the disposal of the Government of the North-West Provinces and Oudh.

NAVAL MEDICAL SERVICE.

Surgeon and Agent H. R. Bramwell, M.B., at Tynemouth.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Lieutenant John Parkinson Atkinson, M.D., 3rd Volunteer Battalion, the Suffolk Regiment, to be Surgeon-Captain.

VOLUNTEER CORPS.

Artillery: 1st Cumberland: Surgeon-Lieutenant C. H. Powers resigns his commission. *Rifle:* 6th Volunteer Battalion the Gordon Highlanders: George Lyon, M.B., to be Surgeon-Lieutenant. *Volunteer Infantry Brigades:* Tay Brigade: Surgeon-Lieutenant-Colonel J. K. Anderson, M.D., 2nd Volunteer Battalion the Black Watch (Royal Highlanders), is appointed Brigade-Surgeon-Lieutenant-Colonel.

THE FILTRATION OF DRINKING WATER.

Professor E. H. Hankin, the bacteriologist and chemical examiner with the Government of the North-West Provinces, India, who recently published a capital little pamphlet on the Bacteriological Test of the Purity of Water, which was noticed in THE LANCET of April 6th, has forwarded a communication to the *Pioneer Mail* of May 22nd on the purification of drinking water in India. Professor Hankin premises that he is not a water-drinker himself, and has no wish to encourage the habit in others. Ordinary domestic filters, he points out, are not only incapable of removing dangerous microbes from water, but are, on the contrary, to be regarded rather as a breeding-ground for them. The Pasteur-Chamberland and Berkefeldt filters, however, depending on a different principle to other domestic filters, have the power of removing nearly all the microbes from water when they are in working order. All dangerous microbes may be removed with certainty from water by boiling it for a short time. Some microbes are only destroyed by prolonged boiling, but these, so far as Professor Hankin knows, are completely harmless. Aerated waters are practically free from microbes if they have been kept for some time after being made. The gas under pressure kills the microbes—the cholera microbe in a few minutes, that of enteric fever perhaps only after a few days. The water of the large rivers in the North-West Provinces is safer to drink than the water from nearly all wells, the precaution being taken not to obtain it immediately below a town or during the rains, as it is, for obvious reasons, safer at other places and seasons of the year. Practically any dangerous microbe that gets into well water in the plains in the North-West Provinces gets there by direct human agency. If the well is properly covered in and the water raised by a pump this risk may be avoided. The good effect of such an arrangement is likely to be nullified if a filter is attached to the well or if any other open wells are left in the same compound. Professor Hankin is experimenting with potassium permanganate as a means of cleansing and disinfecting well water.

The results obtained by adding the substance, in the proportion of one ounce to an ordinary sized well, have been encouraging, though they are not sufficiently numerous for him to definitely recommend the practice as a sanitary precaution.

THE LATE SIR EDWARD HAMLEY.

The late General Hamley was a remarkable man in more ways than one. He was a gallant soldier who had distinguished himself by his valour in the Crimea, a strategist who had published a text-book on "The Operations of War" which has a European reputation, a brilliant writer and a novelist and essayist of no mean merit, and yet there can be no doubt that at the time of his death he was a disappointed man and laboured under a sense of wrong. With an unusual number of fine qualities he had an assertive and somewhat austere manner which probably led to his being misunderstood and misrepresented. The main cause of General Hamley's feeling of injustice and disappointment was connected with his services in command of the Second Division at the battle of Tel el-Kebir, upon which fell, he alleged, the main burden and success of the assault. Mr. Shand, his biographer, who has written a very interesting account of Sir Edward Hamley's life, has gone fully into the subject, and the question which occupies the military mind at present is whether any explanation in the way of reply will be forthcoming. It is a subject that does not come within the province of medical journalism, and about which, of course, we are not competent to express any opinion, but our readers cannot have forgotten that an inquiry took place into the conduct of the medical service in the Egyptian campaign of 1882. Medical officers at the end of that expedition—in which better results had been obtained than had ever before been accomplished in the treatment of wounds and sickness in warfare—found themselves called upon to vindicate their department and its work on that occasion from what they thought unjust and ungenerous attacks. The result was not unsatisfactory to the medical service, and it was always understood that the late Sir Edward Hamley was no participator in the views of those who attacked it.

ARMY MEDICAL STAFF IN INDIA.

We are pleased to be assured by the Secretary of State for India (*vide* our Parliamentary Intelligence, p. 1555) that the establishment of the Army Medical Staff in India is considered sufficient for the requirements of the Army in peace and war, and that there is no reason to suppose that it is "terribly undermanned"; but this official answer to a question put by Mr. A. C. Morton does not at all dovetail with the following extract from a letter of an officer in India, recently published in the *Army and Navy Gazette* on the condition of garrisons after the mobilisation of hospitals for the Chitral relief force had been carried out:—"The hospitals have been successfully mobilised for the expedition, but the result is that the stations are denuded of medical officers, chiefly those of the Indian Medical Service; all leave is stopped, and men are going sick with extra hard work. One medical officer is doing duty at the station hospital, is also staff surgeon, and, as well, in medical charge of a native cavalry regiment. Another is in charge of his own corps (a native regiment) and has to look after a large cantonment hospital as well. The Indian Government has no reserve for any emergency like the present. In fact, there is a paucity of medical officers, medical subordinates, hospital assistants, and ward orderlies, to carry on the medical duties of garrison hospitals."

THE LEE-METFORD ARMY RIFLE.

Some doubt has been felt and expressed by military men as to the efficiency of the small new regulation projectile, used with cordite powder, to break the "rush" of an enemy on a line or square. A communication in the *Standard* of the 12th inst., in calling attention to this subject, quotes from a letter received from an officer engaged in the fighting at the Malakand Pass and at Khar during the recent Chitral expedition. Allowing for the fact that, as the writer does not appear to be a medical officer, his description may be inaccurate, the quotation is to the effect that a wounded Swati in one of the field hospitals was found to have had no less than six bullets through him—through the knee, ankle, trunk of the body, and one through the back of the neck, traversing the mouth, wounding the tongue, and carrying away two upper front teeth in its course. It is stated that the wounded man was able nevertheless to go voluntarily to the hospital for treatment and was doing well. The correspondent of our contemporary asks whether such immunity from immediate disablement to an enemy does not mean greater danger and loss to our own soldiers when withstanding a charge or rush, such, for instance, as we experienced with the Arabs in the Soudan.

THE CHITRAL RELIEF FORCE.

According to the latest accounts, the health of the force—both European and native—is very good. The troops which composed Colonel Kelly's force have been suffering from the effects of their late exposure, severe marches, and the hardships they underwent. As we have already said, the fact that Colonel Kelly and his officers were comparatively unknown men in command of a small force of native soldiers and followers, is one of the most satisfactory things about the grand achievement they undertook and successfully accomplished. The enterprise, the fearlessness and courage of the leaders, and the pluck and endurance of the men who accomplished the work they set themselves to do are qualities of which we must all feel proud. The advance of the larger expedition under General Sir R. Low no doubt materially influenced the course of events and enabled Colonel Kelly's force to do what it did—namely, to make one of the most memorable marches on record. The description of this march from Gilgit to Chitral by the special correspondent of the *Times* is one of the most interesting narratives that has appeared for a long time.

INSPECTION OF THE VOLUNTEER MEDICAL STAFF CORPS.

The London Companies of the Volunteer Medical Staff Corps were inspected by the Duke and Duchess of Teck on Saturday, June 8th, when some 200 men paraded at Putney under the command of Surgeon-Colonel Norton. The smartness of the men, upon which they were complimented by the Duke of Teck, spoke well for the training they had received.

LEAVE FOR MEDICAL OFFICERS SERVING IN INDIA.

The *Pioneer Mail* of the 22nd ult. states that the Government of India have decided that leave out of India may now be granted to medical officers on the usual conditions—viz., if their services can be spared locally and with the consent of the Principal Medical Officer at headquarters.

Surgeon-Captain Michael Thomas Yarr, A.M.S., attached to the Coldstream Guards, has been appointed physician to the Crown Prince of Siam.

Correspondence.

"Audi alteram partem."

HOSPITAL SUNDAY.

To the Editors of THE LANCET.

SIRS,—For the twenty-fourth successive year the Council of the Hospital Sunday Fund—of which, in my official capacity as Lord Mayor, I am president and treasurer—have to claim your indulgence in drawing public attention to the approach of Hospital Sunday, and in invoking increased assistance for the medical charities of this great metropolis. The various congregations in the churches and chapels of London will have their attention drawn on Sunday next (Hospital Sunday) to the needs of these institutions and to the vast work which they are effecting among a population of over five millions, living close to each other, the majority of whom are poor, and many are sick, suffering, and dying.

Last year's statistics afford valuable testimony to the beneficent character of the operations of the hospitals and dispensaries of London. From these it is gathered that the voluntary hospitals and medical charities in the Metropolis relieved during 1894 no fewer than 1 383 000 patients at a cost of £699 527.

The ordinary income of the institutions amounted to only £559,725, leaving a deficiency on the year's work of £139 802. The number of beds in the hospitals is 8391, but only 6490 were occupied and nearly 2000 constantly remain empty for want of funds. The Hospital Sunday Fund distributed last year over £40,000 among ninety hospitals, twenty-two convalescent homes, thirteen cottage hospitals and fifty-four dispensaries, and in addition purchased surgical appliances for 2814 sufferers requiring that form of relief. The number of

contributing congregations was 1799, being the largest ever recorded in the fund's history, and representing every form of faith.

This year the Council venture once again to appeal for funds towards covering the deficiency of over £130,000 which remains when the ordinary income of the charities is exhausted. They feel that if this large sum is not actually raised by this one effort the benevolence of the public will, as in past years, materially supply the needs of the medical institutions. The value of the hospitals is not merely gauged by the amount of suffering relieved; it is within their walls that our medical practitioners acquire their skill, experience, and knowledge, that nurses receive their training, and the sanitation of our great city is improved and advanced.

On the religious aspect of the movement it is not for me to dwell. I would only say that it is an edifying sight on this annual recurrence of Hospital Sunday to witness people of all denominations and creeds sinking their differences and joining heartily in lending helping hands in the interests of the sick and suffering poor of this teeming city.

While it is desirable and conducive to convenience that intending donors should forward their contributions through their respective places of worship, I shall be glad to add to the fund any subscriptions which may be sent direct to me at the Mansion House.

Thanking you for the publicity which I feel sure you will accord to this appeal,

I am, Sirs, your obedient servant,

JOSEPH RENALS, Lord Mayor.

Mansion House, London, June 13th, 1895.

BATHING AND AURAL DISEASES.

To the Editors of THE LANCET.

SIRS,—As the bathing season is commencing it is not out of place to call attention to the fact that every year a number of patients are seen suffering from some aural disease which is directly attributable to bathing, especially sea-bathing. The most frequent troubles are acute otitis media, acute diffuse otitis externa, often associated with a ceruminous plug, a combination of the two preceding lighting up an acute condition in a chronic suppurative otitis media, simple deafness from swelling of a ceruminous plug, and occasional extension of a suppurative process to the antrum, mastoid process, &c. Other troubles from diving, such as concussion of the labyrinth, rupture of the membrana tympani, with subsequent acute otitis media, are occasionally seen; and there seems no doubt that sea-bathing is a cause of exostoses. The question as to how these may be avoided is an important one. It should be a rule that persons suffering from middle-ear discharge should never bathe at all, and those who have had middle-ear discharge and whose membranes have healed, or those who have any tendency to ear troubles, should never bathe without some efficient means for preventing water entering the ears, such as firm plugs of cotton wool with an oilskin cap fitting tightly over them as recommended by Dr. Urban Pritchard. Water remaining in the healthy ear should be let out as soon as possible; to effect this it is a good plan to incline the head well over to the affected side, straighten the meatus by pulling the auricle upwards and backwards, and execute a series of hops on the foot corresponding to the affected ear. The acute otitis seems to be occasionally caused by water which has entered the naso-pharynx being blown into the middle ear by the forcible efforts to expel it by the nose; this danger is of course greater if there is a nasal block present.

I am, Sirs, yours faithfully,

Harley-street, W., June 8th, 1895. ARTHUR H. CHEATLE.

THE "LIBERATOR" RELIEF FUND.

To the Editors of THE LANCET.

SIRS,—In accordance with a suggestion made by numerous sympathisers with the "Liberator" Relief Fund it is proposed to have a "Liberator" Sunday on the first Sunday in next month, July 7th, when the special claims and distressing need of the aged and destitute victims in this truly national and cruel disaster may be declared from every pulpit in the land, and all the worshippers present at least given an opportunity of contributing something, many of whom may not be able to spare the time or may not think it worth while to send their small subscription by means of a postal order to the office of the fund. We beg very heartily to commend the proposal to Christian Churches of all denominations, believing that if adopted to any general extent it would go far towards realising the much-needed augmentation of the fund, whilst affording a happy and striking illustration of the essential oneness of the various sections of the Christian Church in the work of Christ-like charity. The Executive Committee are now sending an earnest request for a collection, or part collection, to every clergyman and minister whose name and address they can procure, but lest they should fail to reach anyone who may be willing to join in this final endeavour to raise the Fund to the £100,000 required before it can relieve in any adequate sense the worst cases, we should greatly esteem if you would kindly give your valuable aid by calling attention to this special effort. We should like to add that a pamphlet has been prepared dealing at length with this matter, entitled "Liberator Victims: a First-charge on Christian Charity," copies of which, in any number desired, the Rev. J. Stockwell Watts, honorary secretary (16, Farringdon-street, E.C.), will be pleased to forward to clergymen or ministers willing to distribute the same among the members of their respective congregations.—Sincerely thanking you in advance for the kind insertion of this letter,

We are, Sirs, yours faithfully,

(Signed) KINNAIRD.
F. W. FARRAR, D.D. (Dean of Canterbury).
WILLIAM SINCLAIR (Archdeacon of London and Canon of St. Paul's).
URIJAH R. THOMAS (Chairman, Congregational Union of England and Wales).
J. MONRO GIBSON, M.A., D.D. (Presbyterian).
HUGH PRICE HUGHES, M.A. (Wesleyan).
ROBERT F. HORTON, M.A., D.D. (Congregational).
J. CLIFFORD, M.A., LL.B., B.Sc. (Baptist).
MARK GUY PEARSE (Wesleyan).
J. MORGAN GIBBON (Congregational).
H. ARNOLD THOMAS, M.A. (Congregational).

June 12th, 1895.

THE MEETING OF THE GENERAL MEDICAL COUNCIL.

To the Editors of THE LANCET.

SIRS,—I beg to call your attention to the report in your issue of the 8th inst. of the case of Mr. G. F. McCarthy on page 1470. By some oversight it is stated that "Dr. Braxton Hicks addressed the Council" &c. It is, no doubt, known to you that my father is Dr. J. Braxton Hicks, and in no way was concerned in the matter, and I should be glad if you will correct this in your next issue.

I am, Sirs, yours faithfully,

A. BRAXTON HICKS,

Lupus-street, W., June 8th, 1895. Coroner and Barrister-at-Law.

*** We regret the oversight.—ED. L.

DEFECTS OF VISION AND ACCIDENTS.

To the Editors of THE LANCET.

SIRS,—This subject, I am sure you will agree with me, is worthy of notice in your journal. My knowledge of the question extends backwards to the year 1870. I was surgeon of the Cunard steamer *Russia*, and I had a unique experience in that capacity. The *Russia* was then a perfect steam-yacht, carrying no emigrants, and no member of the crew left her except through death or promotion. On one trip, during the muster prior to sailing, I detected a new member amongst the crew, and on looking at him carefully discovered that he had a glass eye. This set me thinking, and I made an examination of all the men who were on duty for that night, the result being that I discovered that the man on the opposite side of the bridge was also imperfect in his vision. These men were relieved from look-out duty. The following night, running down the Channel, we missed almost by a hair's breadth a collision with an East Indiaman. What would have been the result had these men with imperfect vision been on the look-out that night I do not know. *Ab uno disce omnes.* That is the whole history of the origin of what I have done with reference to the question of defective vision as a cause of disaster at sea. In 1875 I wrote to you on this matter and you noticed my letter in an editorial paragraph. The matter was subsequently brought to the notice of the then President of the Board of Trade, Sir Thomas Grey, and was adopted by the

Cunard Company as an imperative law of their service. Recently an important deputation waited on the President of the Board of Trade on the subject. It seems to me that this deputation has fallen flat. I have personally written to the President, and have received simply an official recognition of the receipt of my document. And now, Sirs, it seems to me that the time is ripe for your powerful journal to take hold of this matter and insist upon one thing, the only remedy—namely, the appointment of a competent medical officer to the Board of Trade, who shall be able to render a full account of the competency of men who have charge of the lives of people at sea. I might prolong this matter further, but I believe this will suffice.

I am, Sirs, yours faithfully,

R. A. CALDWELL.

Sussex-place, Southampton, June 11th, 1895.

To the Editors of THE LANCET.

SIRS,—So many letters have appeared in THE LANCET recently on the subject of "Colour Vision and Accidents" that I think it may interest your readers to know that on the East Indian Railway - the largest undertaking in the East—every precaution is taken to safeguard the travelling public from any accident arising from colour blindness. The East Indian Railway has a medical department of its own, and the medical officers are responsible for the sight and colour vision of every candidate for employment who can in any way have anything to do with the working of trains or signals. For more than twelve years each candidate has had to pass the following tests in addition to the ordinary health examination: Holmgren's wools and army test dots by day, as well as being tested at night with a lamp specially designed for the purpose by Mr. H. H. Bathe, one of the company's medical officers. Both Europeans and natives must pass each test, and if their sight or colour vision is defective they cannot obtain employment. The test at night is very useful, as night blindness is very common in India. The lamp used is of excellent design and can be made to represent a signal at any distance. I have never known anyone who was colour-blind to distinguish correctly between green and red when the colours were alternated with rapidity. Mr. Beaumont, in your issue of April 20th, remarks that drivers can generally tell what the signals are by the difference in intensity, and goes on to say very truly that this is a most dangerous means of differentiating between green and red, as, owing to hurry or foggy weather, a man's train may be off the rails before he has made up his mind whether the signal is against him or in his favour. The lamp we use, representing as it does a signal, is a sure test for this kind of vision, as it can be turned from red to green with such rapidity that a man cannot pass unless his colour vision is perfect, and when taken together with the other tests forms a perfect safeguard. I may add that when a man is to be promoted or granted an extension of service such promotion or extension depends on his passing these tests of eyesight. Should he fail his career as a "running man" is at an end. I trust you will pardon the length of this letter, but the subject of colour vision is now so much discussed in England, and is one of such vast importance both to the public and to the railway authorities, if they would only realise it, that it seemed to me that a sketch of the actual working of correct tests for many years on a large railway in India might prove helpful.

I am, Sirs, yours faithfully,

J. STUART BROOKE,
District Medical Officer, East Indian Railway.

Asansol, Bengal, May 11th, 1895.

THE TREATMENT OF PSORIASIS.

To the Editors of THE LANCET.

SIRS,—Having been unavoidably absent from the Dermatological Society when Dr. Crocker read his paper, I am consoled by finding it published by you, especially as it contains support of the internal microbic nature of psoriasis. At the Birmingham meeting of the British Medical Association I read a paper on the Parasitical Nature of Psoriasis and its Treatment by Mercury,[1] in which I advocated this view on the grounds (amongst others) of its symmetery, the dilatation of the papillary vessels, and the utility of parasiticidal drugs, although there was not verification of Lang's epidermotophyton. Some evidence of contagiousness was then adduced, and more has since been added. Salicin and the salicylates (which Dr. Crocker recommends), carbolic acid, the iodides, and arsenic are microbicides and can act in no other way. I am satisfied with that proven microbicidal measure, a mercurial course internally, or by inunction, or both combined. For twenty-five years I have treated psoriasis in no other way, and, failures and recurrences having been very few, I regret it has not been extensively adopted by the profession. I may add that I have found no evidence of correlation between psoriasis and the rheumatic or any other diathesis.

I am, Sirs, yours truly,

E. D. MAPOTHER, M.D.

Cavendish-square, W., June 10th, 1895.

[1] Brit. Med. Jour., Jan. 17th, 1891.

THE MEDICAL GUILD AT MANCHESTER AND THE INSURANCE OF CHILDREN.

To the Editors of THE LANCET.

SIRS,—With reference to the "Bill to amend the Law relating to the Insurance of Burial Expenses of Children" at present before Parliament, I am requested to send you the following resolution, passed at a meeting held on May 30th: "That in the opinion of the Council of the Medical Guild the most satisfactory check for the evils arising out of the insurance of children would be provided by enacting that it be required of all insurance companies and clubs, whenever a death claim is made and before it can be paid, to obtain in every case a medical certificate of the cause of death directly from the practitioner who attended the deceased during the last illness, and who certifies the cause of death for the purpose of registration." I am to add that, on the death of an insured child, it would be desirable to require of the insurance society with which it was insured to notify the fact of such insurance to the registrar of the district.

I am, Sirs, your obedient servant,

A. STEWART,
Hon. Secretary.

Manchester, June 4th, 1895,

"ADENOID GROWTHS IN CHILDREN."

To the Editors of THE LANCET.

SIRS,—I have to thank Dr. Eustace Smith for his kind and courteous reply to my questions. I am quite aware that adenoids are common in young children, and for this very reason we are not warranted in ascribing to them any symptom which is not relieved by their removal. I feel sure Dr. Smith will agree with me that the occurrence of some degree of adenoid hyperplasia in two cases of infantile respiratory spasm warrants no deductions as to cause and effect. I have referred to the paper by Dr. Robertson upon which Dr. Smith relies to establish his contention,[1] and cannot find that in any sense it corroborates the somewhat sweeping statements as to adenoids as a cause of infantile respiratory spasm, to which I took exception. If Dr. Smith will again refer to the paper he quotes, he will find that only one case can possibly be ascribed to adenoids. Even with regard to it, however, there is no definite statement to this effect, although it is mentioned that the "post-nasum" was scraped. In this very case inhalation of the larynx, nasal sprays, &c., were also employed. It is, therefore, incorrect to say that "cases" were described by Dr. Robertson proving the connexion between adenoids and infantile respiratory spasm, which I have ventured to doubt. I am very well acquainted with a form of pseudo-croup which owes its origin to adenoids in many cases, and in which the symptoms result from the naso-pharyngeal secretion falling into the larynx, and I am by no means satisfied that this single case, which may possibly support Dr. Smith's hypothesis, was not of this nature. In conclusion, I beg to assure Dr. Smith that it was no spirit of captious criticism which induced me to point out what I believe to be an error in his paper. There is in the present day such a great tendency to over-estimate the importance of limited regions of the body that every new symptom ascribed to such a region must be thoroughly proved before it can be accepted. Adenoid growths are most important in many respects, and it can only be pleasing to specialists to find a physician so justly eminent as Dr. Smith recognising their importance. We, however, find so many well-proved

[1] Journal of Laryngology, 1891, p. 407.

symptoms to be due to this adenoid hyperplasia that we cannot afford to admit also those which rest upon pure hypothesis. I am, Sirs, yours faithfully,

Chester-street, Edinburgh, June 10th, 1895. P. MCBRIDE.

THE INFORMAL PURCHASE OF POISON.

To the Editors of THE LANCET.

SIRS,—No doubt you have, in common with many of your subscribers, read the correspondence going on the last few days in the *Standard* about the poisoning of dogs in Sussex. As one who was present and witnessed the horrid spectacle I found myself soon endeavouring to try to discover the perpetrator of the dastardly act, and while conversing with a well-known Sussex veterinary surgeon he told me the following anecdote. A veterinary surgeon practising in this country was recently ill; during his illness a hamper of drugs arrived at his house, but was not meant for him. It was addressed Mr. So-and-so, Veterinary Surgeon. As he was the only member of that profession for miles round it was delivered to him. He recognised the name of the man for whom it was meant. On examining the invoice *an ounce of strychnine* was found charged for. Therefore the veterinary surgeon wrote to the druggists explaining all the circumstances and asking if they still wished him to send on the hamper with so much poison in it. To this they replied with no little asperity that it was no business of his to meddle with other people's invoices, and he must send on the "goods" at once. They further added that they always executed prepaid orders to anyone who desired them to do so, which is the custom of the trade.

Now, Sirs, if this is so, no wonder that keepers and others can get what poisons they want without troubling the local druggists or going through the formality of signing poison-books. Some stringent measures will have to be taken to prevent a dire calamity from happening some day.

I am, Sirs, your obedient servant,

Brighton, June 7th, 1895. A BRIGHTON SURGEON.

THE BOYLE LECTURE AT OXFORD.

To the Editors of THE LANCET.

SIRS,—Being stone deaf, and—so far as the medical and surgical science and skill of the present day extend—apparently hopelessly so, everything that tends towards the elucidation of the structure and functions of that little understood region, the inner ear, possesses for me an exceptional interest. Professor Crum Brown is reported in a recent lecture to have said that he looked upon the semicircular canals as constituting a special hydrodynamical mechanism for regulating (amongst other things?) the compensatory movement of the eyes. "When the head is moved rapidly in one direction the eyes have to move to a corresponding extent; this movement is carried on by a series of small jerks with pauses between them. The same phenomena are produced when the head is rotated on an antero-posterior axis. ..... In seeking for the cause of this compensatory action of the eyes Professor Crum Brown comes to the conclusion that we have in the semicircular canals a perfectly definite sense organ, which acts by the increase of pressure induced by movement of the head in the membranous ampullæ; the stretching of the ampullary walls by the fluid irritates the nerve endings in the crista acustica." Now, if the above may be taken as a correct rendering of the Professor's theory, I venture to think that the latter is open to criticism on more points than one. In the first place, Do the eyes really have to move to a corresponding extent while the head is going through the motions that are commonly regarded as expressive of negation and assent? Evidently not necessarily so. Any person can prove for himself by simple experiment that his eyes may remain fixed on any object during both processes. All he has to do is to exercise his will to that end. Secondly, the ampullary walls must be just as much subjected to increase of pressure during head movement whether the eyes remain fixed on an object or exhibit compensatory action. What, then, in the former case becomes of the irritation of the nerve endings in the crista acustica? Why should increase of pressure acting upon a perfectly definite sense organ excite compensatory eye movement in the one instance and not in the other? In my humble opinion these unanswerable questions invalidate the whole theory, but of course I am open to enlightenment and correction. The answer to my objections may be as plain as a pikestaff to anyone thoroughly acquainted with Professor Crum Brown's theory; but failing additional data I am unable to pick it out, and hence my desire to read the unabridged lecture. As regards the series of small jerks by means whereof the apparently smooth movements of the eyes are carried on, I would merely beg leave to inquire whether this is not the usual procedure—whether all muscular motion is not carried on by means of series of small jerks, with pauses between them, for all the world like Mrs. Jarley's waxworks on a miniature scale? Such has always been my impression, but I cannot recall the source of origin, or, to be perfectly accurate, it does not seem worth while trying to do so. Finally, what would small jerks be like if there were no pauses between them? I am, Sirs, yours faithfully,

SURDUS.

*** Our correspondent will find the lecture reported in full in our issue of May 25th.—ED. L.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

Birmingham Medical Benevolent Society.

THE seventy-fifth annual meeting of this society was held on the 7th inst. under the presidency of Mr. Priestley Smith. The report stated that the directors were able to speak with satisfaction on the work done during the past year. The invested funds amounted to nearly £12,000. The annual value of grants ranged from £20 to £40. The total sum distributed during the year had been £550. The total number of benefit members was 306. Seventeen new members had joined in the year. The usual votes of thanks were passed, and a number of the members dined together afterwards. Some interest is felt in the management of this society owing to the conservative tendencies of the directorate. It is considered by some that a larger amount ought to be available for distribution, and that the invested sum is too high for carrying out the real objects of the founders. No doubt a wider and more liberal basis of benevolence would tend not only to a greater good to a larger number of beneficiaries, but would be calculated to extend the number of the members, the proportion of whom to the number practising in the district being lamentably small.

Milk Adulterated with "Splash."

A dairy company was recently fined at the local police-court to the tune of £10 for selling milk with 19 per cent. of added water. The company's servant stated that the manager had ordered him when he fetched the milk from the farm to take some "splash" with him and put it into the milk. He also put water with the milk on another date. The tricks of the trade in this instance were properly rewarded by the penalty named, which renders this mode of conducting business somewhat expensive.

Sutton Coldfield and the proposed Sanatorium.

In a previous communication it was mentioned that the offer of the Royal Hotel at Sutton Coldfield as a sanatorium had been generously made by Colonel Wilkinson. It seems that certain of the inhabitants of the town have met to express their strong disapprobation of the scheme. A deputation was formed to confer with the donor as to the circumstances as affecting the locality, much alarm being felt that it would seriously affect the future welfare of the borough. It is to be hoped that the exclusiveness of these particular inhabitants will not prevent the execution of this admirable gift.

Lady Factory Inspector at Work.

In a case involving four summonses Miss Deane, one of Her Majesty's lady inspectors of workshops, prosecuted, with the result that fines were imposed of 20*s.* in one case with costs, 10*s.* and costs in another, and costs in the remaining two cases. The girls employed were kept until ten and eleven o'clock at night, the proper time for leaving being eight o'clock. The frequent plea of inadvertence was vainly argued, and the law asserted its power—a warning not without its value in a large city with numerous workshops of a similar kind.

Hospital Saturday.

The total amount paid into the bank this year has been

£12,447 15*s.* 9*d*., as compared with £11,794 10*s.* 11*d.* last year—a very creditable and satisfactory result for all concerned, in spite of the croakings of bad trade and foreign competition so constantly urged.

June 12th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Victoria University: Conferring of Honorary Degrees.

AN interesting ceremony took place on the 30th ult. at the Owens College. For the first time in its history the Victoria University exercised the privilege of conferring honorary degrees. The day's proceedings opened with a special meeting of the Court of Governors, under the presidency of Earl Spencer, K.G., the Chancellor of the University, who moved, and it was resolved unanimously, to confirm the degree of Doctor of Laws in the Victoria University already conferred upon his Grace the Duke of Devonshire, K.G., President of the Owens College, and the Right Hon. the Earl of Derby, G.C.B., President of University College, Liverpool; and on the further motion of the Chancellor it was further resolved to admit the following noblemen and gentlemen to honorary degrees: The Most Hon. the Marquis of Ripon, K.G., President of the Yorkshire College, to the honorary degree of Doctor of Laws; the Right Hon. Lord Kelvin, President of the Royal Society, to the honorary degree of Doctor of Science; the Right Hon. James Bryce, M.P., to the honorary degree of Doctor of Letters; Sir Andrew Fairbairn to the honorary degree of Doctor of Science; Sir Henry Roscoe, M.P., F.R.S., to the honorary degree of Doctor of Science; Mr. Thomas Ashton, to the honorary degree of Doctor of Laws; Mr. Richard Copley Christie, to the honorary degree of Doctor of Laws; Mr. William Rathbone, M.P., to the honorary degree of Doctor of Laws; Professor Arthur W. Rucker, F.R.S., to the honorary degree of Doctor of Science; Mr. Alfred Waterhouse, R.A., to the honorary degree of Doctor of Laws; Professor Adolphus William Ward, Vice-Chancellor and Principal of the Owens College, to the honorary degree of Doctor of Letters; Professor Gerald Henry Rendall, Pro-Vice-Chancellor and Principal of University College, to the honorary degree of Doctor of Letters; Professor Nathan Bodington, Chairman of the Board of Studies and Principal of the Yorkshire College, to the honorary degree of Doctor of Letters; Professor Daniel John Leech, M.D., F.R.C.P., Chairman of Convocation, to the honorary degree of Doctor of Science; and Mr. Alfred T. Bentley, Registrar of the University, to the honorary degree of Master of Arts. Later in the day the degrees were conferred in the Chemical Theatre, which had been adapted for the purpose of the ceremony by the erection of a dais running the whole breadth of the room, redeeming it somewhat from its usual well-like aspect. A large hall, suitable for such ceremonials and other large gatherings, is one of the wants of the College. The lower part of the theatre was filled with the invited guests of the University, among whom, by the way, men were rare, their absence, from a picturesque point of view, being more than compensated by the greater brilliancy given to the scene by the gay toilets of the ladies. On the benches above were the graduates, several of whom were ladies, wearing the academical costume of gown and hood. The highest benches were occupied by the undergraduates of the College, who entered, as the *Manchester Guardian* puts it, "like a reservoir that has broken its dam," but were, on the whole, marvellously well behaved. Owing to a family bereavement, Mr. Thomas Ashton and his son-in-law, Mr. Bryce, M.P., were unable to be present. In the evening Earl Spencer and other guests were entertained to dinner at the Queen's Hotel by the members of Convocation. Dr. Leech, Chairman of Convocation, presided, and amongst those present were the Marquis of Ripon, Lord Kelvin, Sir H. Roscoe, Mr. William Rathbone, M.P., Sir A. Fairbairn, Mr. R. C. Christie, Sir B. T. Leech, Alderman Joseph Thompson, Sir Charles Hallé, Dr. Ward (Vice-Chancellor), Dr. Rendall (Principal, University College, Liverpool), Principal Bodington (Leeds), Mr. Charles Hughes, Professors Wilkins, Dawkins, Young, Tout, Sinclair, Dreschfeld, Schuster, Jones, Smithells, Kastner, Seaton, Reynolds, Perkin, and Stirling; Mr. E. S. Heywood, Mr. J. E. King, Mr. Henry Wilde, Dr. Caton, Mr. A. T. Bentley (Registrar), and Mr. A. H. Worthington.

"Dr. Niven on Jewish Mortality."

I regret the occurrence of any errors in the notice of Dr. Niven's remarks on the mortality of the Jews in Manchester. It was taken from the reports in the local papers, which must have been inaccurate; but, so far as I have observed, no correction of those reports has been made.

Visit of the Shahzada.

Manchester has been interested to-day in the visit of the Shahzada, who has been received with all the hospitality the Lord Mayor and corporation have been able to give. He has had the opportunity of seeing some of the poorer parts of Manchester, occupied almost entirely by the working classes, and it would be interesting to know what impression was made on the Oriental mind by the sight of hundreds of cotton operatives of both sexes in their ordinary working attire. The work of the day began soon after ten by the inspection of a large cotton mill in Ancoats. In London it has been said that he is listless, but it has not been so here. He was thoroughly interested in the various stages of cotton spinning, from the raw material to the finished thread, and was so much engrossed in the various processes that he seemed the last to wish to leave. On being asked if he cared to see some large engines at a neighbouring mill he said he would like to do so, although his decision deprived him of the pleasure of seeing a crowd of merchants and manufacturers at the Exchange, where a visit had been intended. These engines are of 800 and 600 horse-power respectively, and the Shahzada showed the most intelligent interest, immediately asking for information about them. In this visit he was accompanied by the Lord Mayor, Sir Joseph Leese, M.P., the Recorder, and Mr. Talbot, the town clerk, and three or four of the aldermen of the city, together with the members of his suite and Colonel Talbot, who acts as interpreter. From the mills the *cortège* drove slowly through the streets, where crowds of people were waiting to obtain a glimpse of the Prince to the town hall, where an address was presented to him. His reply, which seemed to be spontaneous, was very cordial, and, when translated by Colonel Talbot, elicited hearty applause. The Lady Mayoress was then presented to his Highness, and also Sir J. Harwood, after which the mayors of some twenty neighbouring towns, decorated with their gold chains of office, shook hands with the Prince. He was afterwards entertained to luncheon in the large hall. The members of the council and invited guests numbered about 250. Many ladies were present when he received the address. The last item in the day's programme was a visit to the Ship Canal. Leaving the town hall soon after three, the Shahzada, with his suite and a number of other gentlemen, embarked on the canal at the Pomona Dock and sailed down as far as Irlam Locks. From Irlam a special train was to take them to Liverpool. This is a pretty good day's work, and it must be hoped that the last part of it will not try the endurance of his Highness too much, for the dry hot weather we have had lately has brought the smell, or rather the stench, of the canal to a pitch rarely, if ever, surpassed. If not impressed with the greatness of this engineering work, he will surely bear away a lasting recollection of the odour with which he was regaled. He has been said to look bored and apathetic, but was evidently moved on hearing the volume of sound from the fine organ in the hall, when Mr. Pyne (a cousin, by the way, of Sir Salter Pyne, who is high in the confidence of the Ameer) played "God Save the Queen," and he also seemed to enjoy smoking cigarettes at the conclusion of luncheon.

Theses for the M.D. Degree, Victoria.

The dissertations of the following candidates have been approved by the Council as qualifying for the degree of M.D.:—(1) A. J. Edwards, M.B., on "Disseminated Sclerosis"; (2) W. J. Kerr, M.B., on "The Effects of Alcohol on the Liver"; (3) Frank Robinson, M.B., on "A Clinical Record of 200 Cases of Small-pox"; (4) W. W. Stoney, M.B., on "Ophthalmic Goitre"; (5) R. T. Turner, M.B., on "Infantile Paralysis resulting from Cerebral Disease." The dissertations of A. J. Edwards and W. J. Kerr are highly commended, and the dissertation of W. W. Stoney is commended.

June 11th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

The Temporary Hospital in Edinburgh.

THE public health authorities in Edinburgh have had it intimated to them by the Board of Works that it is time they

should remove the temporary hospital erected in the Queen's Park during the small-pox epidemic last year. The erection of the hospital was much objected to at the time, and the citizens will be glad when it has ceased to exist. The authorities, however, propose to delay its removal until it is assured that small-pox has definitely disappeared.

Professor Annandale.

Professor Annandale's numerous friends and old students will be sorry to know that he has been in such indifferent health that he has not been able to attend to his professorial and hospital work for some weeks. He is, however, progressing satisfactorily.

Glasgow Royal Infirmary.

The managers have recently for the first time acted upon their resolution to terminate the appointment of physician or surgeon to the infirmary at the end of ten years. Apart from the hardship this entails upon individuals it may be questioned whether the policy is a wise one from the point of view of the hospital itself. The position of a hospital physician or surgeon ought certainly to be conferred only on those who have trained themselves carefully in the junior and subordinate positions. This means years of tedious and unremunerated work. If at the end of this a short ten years is to be the full time permitted for the more dignified and, in an indirect way, better remunerated positions, younger men may well pause before they deny themselves the more rapid successes of private practice for the sake of cultivating an efficient hospital training. It will certainly be impossible to get men to devote themselves entirely to medicine or surgery, as the case may be, if only so brief a prospect of establishing a definite position is permitted to them.

Medical Evidence in Criminal Cases.

There has been for some time amongst a section of the profession a feeling of dissatisfaction with the regulations which govern the preparation of the medical evidence in murder cases and in other cases involving a post-mortem examination for legal purposes. Under the present system this examination is made by the two medical men appointed by the Crown, and their report is submitted in court as evidence, they themselves being present to support it in the witness-box and to undergo the ordeal of cross-examination. But no attendance of a medical man in the interests of the accused is permitted at the post-mortem examination. This, it is claimed, is unfair, or may be unfair, to an accused or suspected person. On the other hand, it is answered that the Crown representatives are quite independent, and have no temptation to be anything but impartial, whilst the representative of a prisoner must necessarily, in order to justify his existence, endeavour to strain everything in his client's favour. Doubtless the advantages are not altogether on the one side, but it would certainly remove all semblance of unfairness, and be more in harmony with modern practice, to allow the prisoner to have a medical representative at the post-mortem examination; the theories of the defence would of course be subject to examination in open court, and could thus, if necessary, be discredited. And, further, it is difficult to believe that every man appointed by the Crown to be an examiner for medico-legal purposes can successfully resist the bias which the position suggests. Those who are advocating a change in the present practice have brought the question before the highest legal officials, and from a recent answer given by the Lord Advocate to a question put to him in the House of Commons it was supposed that on application a medical man would be permitted to represent an accused person at any post-mortem examination made by the Crown officials. This impression seems to have been unwarranted, as the application of a prisoner at present lying under a charge of wife murder to be thus represented has just been refused by the Crown. It is probable, therefore, that some further movement may be expected in the matter.

Medical Appointment.

Dr. Maxwell Ross, Dumfries, has been appointed medical officer for the burgh of Moffat in the room of Dr. Grange, who recently resigned.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Irish Workhouse Scandal.

THE Irish Medical Association recently addressed a circular letter to the medical officers of the unions in Ireland asking for definite information as to the condition and wants of workhouses and workhouse infirmaries. Seventy-nine of these gentlemen supplied the required information, while others declined to do so on the ground that they feared to incur the hostility of their respective boards. The replies have been carefully analysed and compared, the result being a series of grave reflections on the administration of many of the Irish workhouses. The matter has now been made public by a letter addressed to THE LANCET and other journals by Sir Philip Smyly and Mr. Hepburn, the chairman and hon. secretary of the Association. From their statement it appears that "forty-three of the infirmaries have no trained nurses, the nursing being left altogether in the hands of pauper women, in fifty-nine there is an absence of all sanitary arrangements, and in forty-three there are neither plates, knives, nor forks." These statements, upon which you commented last week, seem almost incredible, and one is not surprised to see in the press a challenge to the Medical Association to make public at once the names of the unions in which the sanitary arrangements are as described, and of those in which the inmates are not allowed the use of plates or knives and forks.

Irish Representation on the General Medical Council.

It was the good fortune of Dublin to have on the occasion of the recent meeting of the General Medical Council a very full representation, for, in addition to Sir John Banks, Sir Philip Smyly, Dr. Atthill, and Dr. Moore, Dr. Haughton of Trinity College happily found himself strong enough for the journey to London and for the heavy work of the session. Dr. Atthill and Dr. Moore have been working on the Pharmacopœia Committee.

St. Michael's Hospital, Kingstown.

Mr. L. Halligan, L.R.C.S., L.R.C.P. Irel., has been appointed resident medical officer to the above hospital for the ensuing year.

Death of Dr. Robert Kerr Johnston of Dublin.

On Saturday, June 1st, the remains of the late Dr. Robert K. Johnston were removed from his residence, 22 Lower Baggot-street, for interment at Mount Jerome Cemetery. The deceased gentleman, whose funeral was largely attended, was most popular in his profession and amongst all classes in Dublin. His demise at such a comparatively early age has caused a widespread feeling of sympathy with his relatives. Dr. Johnston obtained the degree of M.D. in 1885 and was a most distinguished graduate of Dublin University as well as a Senior Moderator and Gold Medallist in Experimental Science. He filled for some years the office of ophthalmic surgeon to Dr. Steevens' Hospital, and was assistant surgeon to the National Eye and Ear Infirmary.

The Irish Medical Association and the Poor-law Officers Superannuation Bill.

The annual meeting of the Irish Medical Association took place on the 3rd inst. at the Royal College of Surgeons in Ireland, Sir William Stokes, the new president, being in the chair. The report of the delegates deputed by the association to further in Parliament the Poor-law Officers Superannuation Bill contained a statement, *inter alia*, that all their efforts to induce members of the National Federation party to undertake the task of introducing the measure and watching its progress in the House had failed. Mr. T. W. Russell, M.P., to whom the thanks of the association are due, ultimately undertook the work and introduced the Bill, only to see it peremptorily stopped at its second reading. The delegates now report that they can entertain no hope that the Bill will ever pass unless after discussion as an opposed measure. Under these circumstances the council of the association resolved to consult all the Poor-law medical officers of Ireland as to the advisability of advocating the extension of the English "Bill to provide Superannuation for Poor-law Medical Officers" to Ireland. That measure, introduced in last February, proposes that in return for a percentage contribution from their salaries every Poor-law officer shall be entitled to a superannuation allowance when he becomes incapable of discharging the duties of his office. The council, taking into consideration the probability of its passing, have consulted the medical men in Ireland who are most interested in the matter, with the following result: to 1119 circulars sent out there were 622 replies, which included 423 ayes, 184 noes, and 15 spoiled votes. The Poor-law medical officers of Ireland have therefore, by a substantial majority, pronounced themselves in favour of an extension of the "percentage contribution system" to this country.

Fire in a Medical Man's House.

A fire, involving the loss of some valuable property, took place on the 10th inst. at the residence in Dublin of Surgeon-Lieutenant-Colonel Holmes, who holds an appointment at the Royal Infirmary. The upper rooms of the house were entirely destroyed and several articles of vertu, gold and silver coins from India, &c. were found buried in the ashes.

Society for the Prevention of Cruelty to Children.

On Thursday, June 6th, the annual meeting of the Belfast branch of this society was held. It was reported that during the past year 816 cases were investigated, of which 796 were found to be well founded. These cases involved the welfare of 2396 children. Reference was made at the meeting to the help given by the city coroner, Mr. Finnigan, to the society, and especially to his manly stand on the question of the insurance of children.

Quadruple Birth.

On June 9th a poor woman in the dispensary practice of Mr. Irvine of Ballyhalkamore, Belfast, gave birth to four children; one lived for an hour, and the other three were still-born.

Proposed Museum for Bangor, co. Down.

I understand that Captain John Johnstone, superintendent of the Johnstone Steamship Company, Liverpool, himself a native of Bangor, co. Down, has offered to present to the place of his birth his valuable museum, which is claimed to be one of the finest private collections in the kingdom. It comprises natural history objects, bric-a-brac, ancient weapons, coins, an Egyptian sarcophagus, &c. At a meeting of the inhabitants of Bangor, held on June 7th, it was decided to convey their thanks to Captain Johnstone and to accept his most generous offer. Captain Johnstone will also defray the cost of transit of his museum, and will give a subscription towards a hall. It is thought the present would be a good time to build a town hall in which the museum, library, &c. could be located and which would be a most useful addition to a seaside resort visited by so many Ulster people.

Strangford Lough Boating Accident.

On June 8th the body of another of those drowned on April 11th (Miss Fanny Cheshire, Lady Kathleen Cole's maid) was picked up in the lough at Priesttown, near Portaferry. Of the eight drowned three have now been recovered, so that five bodies are still missing.

Downpatrick Water-supply.

At a meeting of the Downpatrick board of guardians held on June 8th Mr. Olpherts, medical officer of health, reported that, the new water-supply having failed, it would take months (perhaps years) before they could obtain a safe drinking water. The storage reservoir holds a very few days' supply now that it is used for flushing purposes. He says there are nine or ten streets without any supply, one street with a supply unfit for use, and three streets with a scanty supply. The public supply would long since have failed but for the kindness of those who have private pumps. He urges the sanitary authorities to bestir themselves in the face of a water famine. The town now gets its supply mainly from pumps.

A Rector's Bravery Rewarded.

Before the commencement of the ordinary business of the Petty Sessions Court at Tralee last week a very interesting function took place. Mr. Lynch, R.M., presented the medal of the Royal Humane Society to the Venerable Archdeacon Orpen, Rector of Tralee, for conspicuous bravery in saving the life of a boy who had fallen into the canal. The magistrate in making the presentation briefly explained that the Archdeacon, finding the lad was in imminent danger, waited only to divest himself of his great coat, and then plunged in at considerable personal risk. All who had witnessed the rescue were loud in praise of the promptness and pluck exhibited by the rector. Archdeacon Orpen on receiving the medal was greeted with loud applause.

Sad Deaths of Two Brothers from Sunstroke.

The weather in Cork has recently been very hot, and headache has been rather a prevailing complaint. I regret to say that two very distressing cases of sunstroke occurred in the course of last week in the neighbourhood of the city. A boy fourteen years of age, on arriving home from school last Tuesday evening, complained of dizziness and pain in his head. Surgeon-Colonel O'Connell, stationed at Ballincollig, was requested to visit him, and pronounced it to be a case of sunstroke. In spite of assiduous care the lad sank rapidly and died within about twenty-four hours of the commencement of the attack. A few days later a brother of the deceased, only thirteen years old, was also affected by sunstroke, and survived only some eight or ten hours.

An Enterprising American.

A lady doctor, who states she obtained a medical degree in America, has recently delivered a course of lectures for women in Cork. She made no charge for admission to the first few lectures, but when her subject was "Maternity" payment was demanded at the door. A book entitled "Discourses to Women on Medical Subjects" was on sale at all the meetings, while a *séance* was held every day at the lecturer's residence. She was also ready to sell pessaries and give advice and medicine at fees which seemed to the professional mind out of proportion to the value of her services. In my humble judgment those of the Cork matrons and maids who patronised the lecturer would have shown more prudence by remaining at home and attending to their domestic duties.

June 11th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Suicide in France.

STATISTICS relating to suicides &c. are issued tardily in this country of red tape; it will, therefore, not surprise your readers if I am able to give them in this year of grace, 1895, the figures of 1892. It would appear that the number of suicides, after having diminished in 1889 and 1890, became more considerable during the two succeeding years. In 1880 there occurred 6638 self-destructions; in 1891, 8884; and in 1892, 9285. Minors appear to have every year more frequent recourse to this tragic method of terminating their real or supposed miseries. Thus, in 1892, 87 individuals under sixteen committed suicide, the corresponding figures for 1880 being 55, and for 1890, 80. The number of suicides between the ages of sixteen and twenty-one was for 1880, 267; for 1890, 358; and for 1892, 475. If my memory does not play me false, Alphonse Daudet, whose recent visit to England has excited so much interest, ascribed long ago in his novel, "Froment jeune et Risler aîné," the greater frequency of suicide in modern Paris to the growing prevalence of unbelief amongst the young. I for one believe him to be right.

The Prophylactic Properties of Anti-tetanic Serum.

M. Vaillard[1] has rendered useful service in reminding the profession of the marked prophylactic properties of anti-tetanic serum employed hypodermically. The serum is now acknowledged to be powerless to counteract the virus once the disease is declared in an acute form. When, however, the evolution of the tetanus is slow, the injections, associated with removal of the tissues primarily inoculated, increase the chances of recovery. But it is as a prophylactic agent that the value of the serum is conspicuous. Injected into animals it renders them quite immune against the toxine. This immunity is only temporary, lasting from two to six weeks, according to the dose employed. But successive injections may be had recourse to without inconvenience. Certain and complete immunity is further conferred on animals into whose areolar tissue the virus has been introduced, but a like happy result cannot be predicted with certainty when the poison has been introduced into the thickness of a muscle. This is explicable enough when one considers that it is to phagocytosis that we must look for the successful destruction of the virus, and that this process is always rudimentary in the muscle, whereas in the subcutaneous tissue it is most active. The injection of the serum as a preservative is, therefore, called for in individuals who have met with traumatisms which, from their situation, their nature, and the circumstances attending their infliction, are known commonly to lead to tetanus (contused wounds contaminated with soil, dust, dung, or river mud; wounds complicated with entrance of foreign bodies that have been in contact with the soil). The employment of the serum is again indicated in animals that have undergone operation known to favour the *éclosion* of tetanus (castration, tail-amputation, and operations on the hoof). M. Vaillard tells us that the preventive use of the serum is destined to render immense services to the inhabitants of

[1] Académie des Sciences, May 27th.

tropical countries, where tetanus is so apt to supervene on trivial injuries as to constitute one of the principal causes of death amongst the natives. The serum will be specially applicable in certain northern countries of Europe where tetanus of the new-born is responsible for as much as 60 per cent. of infant mortality. Again, what a prospect of salvation does the employment of the method hold out in military surgery in time of war. In veterinary practice thousands of valuable lives may thus be saved. Already Professor Nocard has inaugurated this preventive treatment, and the injections have been in the hands of several veterinary surgeons the means of arresting the disease after such operations as castrations and such injuries as penetration of a nail into the hoof. Who would, twenty years ago, have prophesied that tetanus would be converted into what it actually is—a preventable disease?

Butcher's Meat.

The regulations best calculated to protect the public against the sale of tainted meat were the object of discussion at some recent meetings of the Académie de Médecine. They culminated in the adoption of the following resolution, formulated by Professor Nocard: "Toute viande destinée à l'alimentation publique ne peut être mise en vente et colportée que pourvue d'une estampille (stamp) prouvant qu'elle a été reconnue saine par un inspecteur compétent; l'inspection doit être faite partout, dans les villages comme dans les villes; on peut l'organiser aisément et à peu de frais sur des bases analogues à celles qui sont adoptées en Belgique."

June 11th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

The Mellage Trial.

SHOCKING revelations concerning a lunatic asylum conducted by monks were brought to light last week in the course of a trial at the assizes at Aix-la-Chapelle (Rhenish Prussia). The case has produced a great sensation throughout Germany, and will no doubt be of particular interest to English readers, as the principal victim is an English Roman Catholic priest. The order of the Alexian monks, to whom is entrusted the care of insane persons and epileptics, possesses several lunatic asylums, both in Germany and elsewhere, under special ecclesiastical management. Public attention was drawn to these institutions by a pamphlet which was some months ago published at Iserlohn (Westphalia), bearing the sensational title "The Sufferings of the Reverend Mr. Forbes, of Scotland, at the Asylum of Mariaberg." The author of this pamphlet, Herr Mellage, asserted that a veritable conspiracy existed between the brotherhood and certain bishops to confine as lunatics such priests as had fallen into disfavour with their superiors. He had obtained this communication from a chaplain who had succeeded in escaping from the asylum, and who had further told him that a Scotch priest, the Reverend Mr. Forbes, was still confined in the Mariaberg Asylum, and had been treated there as a lunatic for three years. Moreover, among other things, he was assured that the patients were very badly treated. On Herr Mellage's representations a medical commission of inquiry was sent to the asylum, which, after only a minute's examination, declared Mr. Forbes to be sane, and ordered his immediate release. On the issue of the pamphlet the Superiors of the Brotherhood prosecuted its author for libel; but at the trial, which lasted from May 30th till June 8th, he succeeded in proving the truth of all his assertions. Mr. Forbes, who appeared in court, gave evidence that his bishop had asked him to go to Mariaberg to be treated for a gastric disorder. He went under the impression that it was a Roman Catholic hospital, and not by any means a lunatic asylum. At first he was allowed outside the asylum, but the brothers, after accusing him of drunkenness, confined him definitively. The certificate required by law was easily obtained of the district officer of health. This certificate was based on a very short examination, which was, moreover, difficult, as Mr. Forbes could not speak German, and merely on the reports of the brothers and on a letter of the Bishop of Aberdeen, who, it was alleged, had stated that there was insanity in Mr. Forbes's family. In order to prove that the statement was unfounded the defendant's counsel had summoned witnesses from Inverness, Mr. Forbes's birthplace. It was, indeed, an unwonted sight, that of half-a-dozen genuine Highlanders in a German law court. They all affirmed that to the best of their knowledge the members of Mr. Forbes's family had always been sane, admitting only that he was known as being somewhat eccentric, and that he had sometimes declared against the Pope and the Roman Catholic faith. Some medical men, who were called as experts, declared that Mr. Forbes appeared to be of a somewhat weak mind, but that he was not insane, that therefore confinement was unnecessary, and that a grave wrong had, according to their opinion, been committed against him. Still greater indignation was produced in court when it was stated by numerous witnesses that veritable mediæval tortures were inflicted on the unfortunate victims in the asylum. It was a common thing to tie the arms and legs of those of them who protested and to dip their heads in cold water until they were nearly suffocated. In one case an inmate was placed on a hot stove till his back was scorched. Some of the victims are said to have died from blows on the head. The medical attendance amounted to a farce; although the asylum had nearly 700 inmates there was no resident physician. Two medical men had been appointed by the brotherhood, who alternately called for an hour daily at the office of the asylum and there inspected those of the patients who were brought before them by the brothers. They hardly ever entered the wards, and when cross-examined by defendant's counsel admitted that they had no special knowledge of mental diseases. They had no influence whatever, and the monks regarded them as their subordinates. As the result of the trial the defendant was, of course, entirely acquitted of the charge of libel, as all his assertions had been proved to be correct. When, after the verdict, the monks left the court they were hissed by the crowd assembled outside, and had to be protected by the police. They will now be charged with ill-treatment and with illegal incarceration, crimes punishable, according to German law, with three years' hard labour. They will, moreover, no longer be allowed to conduct asylums. Public opinion is justified in asking how such things could have been possible at the end of the nineteenth century in a city like Aix-la-Chapelle, and in a civilised country, to boot. No doubt the medical inspection by the district officer of health was wanting in thoroughness. It is impossible to understand how this official, whose duty it is to pay frequent visits to asylums for the insane—without, of course, giving previous notice—had been unaware of the terrible state of things existing in the Mariaberg institution. He was also very indiscreet in giving a certificate of insanity in the case of Mr. Forbes. The behaviour of the two medical attendants attached to the asylum is still more blameworthy. They had neglected their duties, and in acquiescing in such proceedings had shown an indifference incompatible with the honour of medical men. Moreover, they had greatly prejudiced their own country by inducing foreigners to believe that it would be the easiest thing in the world to have an inconvenient person stowed away in a German asylum. Some time ago it was claimed at an ecclesiastical meeting that the treatment of the insane ought in most instances to be withdrawn from medical men and committed to the clergy. The Mellage trial will perhaps now make it appear that it is not at all advisable to increase ecclesiastical influence in the management of lunatic asylums, and that religion has nothing whatever to do with the treatment of mental diseases.

The Social Condition of Midwives.

In the last number of the *Archiv für Gynäkologie* Professor Fritsch gives his views on the present condition of midwives, and suggests some measures of reform. According to him it is very much to be regretted that the older midwives have had no training in antiseptics and are not sufficiently intelligent to understand its importance. Although in many districts post-graduate lectures instituted by the Government are delivered for the benefit of midwives, a great many midwives cannot attend the lectures on account of want of time or for other reasons. As they are obliged to abstain from attendance for a considerable time in cases of puerperal fever arising in any of their patients, they often endeavour to conceal the fact from their medical officers. In order to remedy this and other grievances some well-known obstetric surgeons established midwives' associations in order to give midwives an opportunity to complete their education, and to

relieve them if they were prevented from practising for hygienic or other reasons. A journal was also founded to support their interests, and to keep them acquainted with scientific progress. But these arrangements did not meet with much success; the midwives, for instance, of the smaller country places, where improvement was most called for, could not join the associations. In some places the associations, which were at first under the presidency of obstetric surgeons, very soon tried to get rid of their medical chairmen and assumed a rather hostile attitude towards the medical profession in general. They claimed to be no longer called "midwives" (*Hebammen*), but "lady obstetricians" (*Geburtshelferinnen*), and to be treated on the same footing as medical men. To avoid these bickerings Professor Fritsch suggests that midwifery should not be entrusted to women of the lower and uneducated classes, but that those of a higher social level ought to take up its duties. For that purpose the training of midwives ought to be modified. At present it is undertaken in what may be called seminaries, maintained by the provincial authorities, where the candidates have to board together for half a year. As this is not calculated to attract ladies of education, Professor Fritsch proposes that they should be trained in the lying-in hospitals attached to the universities, in common with the medical students. Of course special lectures would be delivered for their benefit. It would likewise be a great advantage to medical students if they learned the nature of the duties of a midwife. At present a young medical man may begin practice without having had an opportunity of observing midwifery, and thus is often at a loss what to do in the presence of a midwife. If the measures suggested by Professor Fritsch were adopted, and if ladies of good family agreed to undertake the arduous duties of a midwife, the social status of midwives in general would undoubtedly be greatly improved.

June 10th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

The Italian Red Cross.

I HAVE before me the official report of the Central Committee of the Italian Red Cross for 1894, a document full of interest, not only to Italians, but to all nationalities concerned in the humanitarian movement to which it belongs To begin with, the financial condition of the committee is eminently satisfactory, its available funds amounting to 5 699,221 lire and showing an excess of 41.631 lire over the preceding year. Another most gratifying feature is the development of "mobilisable" hospitals for mountain and river service. One of the former I have already described as consisting of fifty beds and as having reached its Abyssinian destination under the direction of Dr. Gino del Prete; the latter has more than once been referred to in these columns as a new and ingenious departure in Red Cross organisation. To utilise the great waterways of the Alta Italia—so rich in lakes, in rivers, and in canals—for floating ambulances is a project to which Italy has taken very kindly, her many rowing clubs having contributed largely to the manning and the *matériel* of these Red Cross cruisers, of which working models have been on view between Lake Como and Milan, and the first of them was described in THE LANCET of Sept. 19th, 1891, under the title of the "Red Cross Afloat." Another highly instructive section of the report is that relating to the exercises and manœuvres of 1894, when the Commander-in-Chief of the Army put on record his admiration of the promptitude and efficiency with which the ambulance service in all its departments was conducted. The diffusion of Red Cross hospitals over the provinces—the so-called "ospedali territoriali"—occupies another interesting page of the report, the success of the movement in the first five "circoscrizioni" being due to the energy and liberality with which the subcommittees coöperated in harmony with the academic authorities and private individuals. Moreover, the recruiting of the *personnel* of the association generally has marked a notable advance within the last official year, in the directing department 76 having been admitted and in the subaltern departments 248. These volunteer bands are all of certified efficiency, thanks in great measure to the courses of instruction given gratuitously by such clinicians as Professor Postemski, who fills the chair of Surgery in our university, and whose "corsi d'istruzione," four in number, were opened to aspirants to Red Cross distinction in the beginning of the present year. Further sections of the report announce a new series of combined "esercitazioni" for 1895, and dwell with satisfaction on the intervention of the Italian Red Cross at the Esposizione d' Igiene delle Facoltà Nazionali di Scienze Mediche to be held at Buenos Ayres, and also on the fact that the association rendered heroic and efficient service during the recent earthquakes in Calabria—a service on which the Minister of the Interior congratulated the Comitato Centrale. Even in the Chino Japanese War the Italian Red Cross (as we learn from the report) was prepared to volunteer assistance to the Japanese conqueror, and only desisted on ascertaining that it had already been anticipated in the humanitarian offer by the Red Cross of Germany. Among the other features of the report is the gratifying assurance that the War Office has undertaken the expense of transporting all the *matériel* of the Red Cross at home and abroad, while a series of obituary notices of distinguished members of the association deceased within the last official year appropriately occupy the concluding pages.

The Ospedale Maggiore at Milan.

This great historical institution has just made a notable addition to its resources in a new pavilion for the treatment of surgical diseases. It is the gift of the Duchessa Litta-Bolognini in memory of her son Alfonso, and accommodates 120 beds. Every improved hygienic detail has been attended to by its designer and constructor, the engineer Emilio Speroni, and at its formal opening on the 5th inst. a large company of the leading surgeons and practitioners of the city and province had occasion to admire its advantages in point of salubrious and cheerful exposure, of lighting and of ventilation, as also its many conveniences for clinical treatment and instruction. The building is hailed as a notable illustration of what Italy may yet do for her great hospitals by the further development of that pavilion system so much demanded in clinical schools still mediæval in character and still fraught with the manifold mischiefs summed up by the late Sir J. Y. Simpson in the word "hospitalism."

June 8th.

AUSTRALIA.

(FROM OUR OWN CORRESPONDENT.)

The Bay View Asylum Commission's Report.

IN October last a commission was appointed to inquire into the management of the Bay View Asylum, Sydney, and it has just presented its final report. It will be remembered that certain definite charges were made against Dr. Vause, the proprietor of the asylum, to the effect that a certain patient was unnecessarily placed in an isolated room without members of his family or the family physician being informed; (2) that he was confined in a stable which was cold, damp, and deficient in light and ventilation; (3) that the patient had no bedding and insufficient clothing; (4) that the room was not properly cleaned; and (5) that the patient was left for more than twelve hours without food or drink, and unattended. The commission deals with these charges *seriatim*. With regard to the first, they find that Dr. Vause carried out a practice which is in accordance with the rules for the management of similar institutions in Great Britain, America, and the colony, but that he committed an error of judgment in not giving information to the family. It is clear that in isolating the patient Dr. Vause was influenced solely by medical considerations, and not by motives of economy or convenience. As to the second charge, the commissioners find that although the building presents an unprepossessing appearance it was originally constructed for the purpose to which it was applied, and had been so used for many years with the approval of the Inspector-General of the Insane and the official visitors. They do not consider the rooms damp or ill ventilated, but think the ventilation might be improved. Regret is expressed that the rooms are detached from the main building and away from the rooms of the attendants. The allegations under Charge 3 are not regarded as of any consequence. The evidence shows that the patient was most destructive, and is conflicting as to the actual provision made; but the commissioners do not consider that purposes of economy entered into the arrangements. As to Charge 4, in the opinion of the com-

missioners the weight of evidence shows that the rooms were properly cleaned. The evidence on Charge 5 shows that the patient was amply provided with food and drink, and while there was some laxity in the matter of attendance he was not left over twelve hours unattended. The commission recommends that inspection of lunatic asylums should be more frequent. Dr. Manning, inspector-general of the insane, dissents from the general report on the general question of what ought to be understood by the term "seclusion" in regard to the insane.

Dispute between the Surgeon and Captain of H.M.S. "Ringarooma."

A court-martial was recently held in Sydney to investigate a charge of wilful disobedience and contemptuous behaviour preferred against the surgeon of H.M.S. *Ringarooma* by the captain. Some dispute arose about the fixing of an operating table, and the captain became so excited that the surgeon considered he was mentally affected and unfit to command the vessel, which was to proceed to sea next day; he therefore ordered him on the sick list. The captain refused to go and placed the surgeon under arrest. At the court-martial a statement was made on behalf of the surgeon to the effect that the captain had appeared morbid and eccentric for some time past, and instances of eccentricity were detailed. The court refused to allow evidence to be called on the question of the captain's health, and after a short consultation found the surgeon guilty and ordered that he be dismissed from Her Majesty's service. Great indignation is felt at the verdict and at the mode of conducting the inquiry, and an effort will be made to challenge the decision.

Outbreak of Typhoid Fever at Erskineville, New South Wales.

Dr. Ashburton Thompson has presented a report on a recent outbreak of typhoid fever at Erskineville, New South Wales. Nineteen out of twenty-six infected houses were in one ward, and the associated conditions peculiar to that ward were the presence of cesspits and serious faults of subsoil drainage and house construction. The surface channels for foul water were improperly constructed, so that their contents soaked into the soil. The houses were often damp, and many were built on made ground with no impervious covering over it.

Management of Grenfell Hospital.

Dr. Ashburton Thompson has also presented a report on the management of the Grenfell Hospital. In September, 1894, charges of cruelty and neglect were preferred against the matron and medical officer in respect to a certain patient, and on his death the medical officer refused a certificate in order that an inquest might be held and the charges investigated. The coroner's jury found that the patient died from tuberculosis, and that "he was subjected to harsh and cruel treatment at the hands of the matron, and to negligence on the part of the medical officer." The matron and medical officer then resigned, but the latter was subsequently re-elected by the subscribers. Dr. Thompson is of opinion: "(*a*) That the medical officer failed to take up that independent attitude of caution and control which he should have occupied in the internal management of the hospital, and consequently fell justly under censure of the jury, although no important evidence was before that body to warrant it; (*b*) that the committee in general must share that same censure in that their supervision and management were such as did not secure to the sick such skilled nursing, humane attention, and necessary appliances (at the least) as are properly believed by the public to be usually provided in a hospital." He recommends further that no person should be appointed matron or nurse in a hospital subsidised from public funds who has not been trained as a nurse, and that the medical officer to the Government should be supplied with proof of adequate training of the person selected before approval is given by him to the appointment.

The Financial Condition of the Melbourne Hospital.

The finances of the Melbourne Hospital are far from satisfactory. The total indebtedness amounts to about £14,000, caused by a reduction in the Government subsidy, payment of heavy interest, and falling off in subscriptions. The committee have reduced expenditure and retrenched in every possible way, but the debt remains. A largely attended public meeting was held in the town hall on April 24th, and it was decided to make a special appeal on behalf of the hospital funds to all classes of the community by a week of self-denial. Circulars will be addressed to the mayors of all the suburban municipalities and of the principal cities and towns, inviting them to constitute themselves collecting centres; and cards will be issued to be distributed to every individual household, explaining the objects of the movement and inviting the coöperation of every member in the house, and it is hoped sufficient funds will be raised by this means to wipe off the debt.

Aneurysmal Varix of the Left Innominate Vein.

At the March meeting of the South Australian Branch of the British Medical Association Dr. J. C. Verco showed a boy aged twelve with a condition diagnosed as aneurysmal varix of the left innominate vein. There was a distinct thrill on the left side of the neck beneath the sterno-mastoid, continuous with slight systolic increase. On auscultation a very low humming murmur was heard, with its seat of maximum intensity over the left clavicle, about one inch and a half from its inner end, and traceable obliquely downwards and inwards across the sternum from the left first interspace to the right second cartilage, with gradually diminishing intensity. It was continuous with a distinct systolic increase, and was more marked in the recumbent than in the erect posture. The normal heart sounds could be heard distinct and pure, and the murmur could be traced from the clavicle upwards into the neck and outwards along the line of the left subclavian and axillary veins to a point below the insertion of the pectoralis major. The boy had suffered from fits since he was eighteen months old. He had had no other illness except measles. Dr. Verco concluded there was a communication, probably congenital, between the left innominate vein and either the arch of the aorta or, more probably, the left carotid artery.

Ligature of Carotid and Subclavian for Innominate Aneurysm.

At the Melbourne Hospital recently Mr. Charles Ryan successfully tied, first, the right carotid artery, and then a week later the right subclavian for a large innominate aneurysm. The patient has done very well so far, and the aneurysm appears to be consolidating.

Bullet Wound of Femoral Artery.

Mr. Ryan also operated recently on a very interesting case. A boy was shot in the thigh with a revolver, and also in the mouth. There was very little extravasation of blood in the thigh, but no pulsation could be felt in the tibial arteries, and it was decided to cut down on the femoral. It was found that the bullet, which was smaller than the calibre of the vessel, had passed exactly through the centre of the artery. It was ligatured above and below, and the wounded portion excised. The inner coat had retracted and the vessel above and below the wound was plugged with clot; hardly any hæmorrhage had taken place.

Leprosy in Queensland.

At the last meeting of the Medical Society of Queensland Dr. Hardie exhibited a boy eleven years of age, of English descent but born at sea, suffering from leprosy. So far as is known he had never come in contact with any cases of leprosy and had been attending school. The diagnosis was confirmed by bacteriological examination, and filariæ were also found in his blood.

Renal Surgery.

At the last meeting of the Victorian Branch of the British Medical Association Mr. G. A. Syme read some Further Notes on Renal Surgery, and brought forward two cases of nephrectomy and one of floating kidney associated with perinephritic abscess. The interest of the first case of nephrectomy was that it was performed for carcinoma occurring in a kidney from which a large calculus had been previously removed by nephro-lithotomy.

Appointments.

Mr. Fred. D. Bird, M.B., M.S. Melb., M.R.C.S. Eng., has been elected Lecturer on Surgery in the University of Melbourne; Mr. G. Rothwell Adam, M.B. Edin., has been appointed Medical Officer to the Infirmary Department of the Women's Hospital, Melbourne, as locum-tenent for Dr. Rowan, absent on leave; Mr. A. E. Salter, M.B. Melb., has been appointed Resident Medical Officer to the Midwifery Department of the Women's Hospital, Melbourne; the Hon. Dr. MacLaurin has been elected Vice-Chancellor of the Sydney University; Mr. E. H. Binney, M.B. Syd., has been elected Senior Resident Medical Officer, and Messrs. R. R. McKinnon, M.B. Syd., M. Veech, M.B. Syd., G. F. Rutter, B.A., B.Sc., M.B. Syd., and E. J. Spark, M.B. Syd., have been elected Resident Medical Officers at the Sydney Hospital.

Obituary.

ALFRED SWANN, M.D. BRUX., M.R.C.S.

WE regret to have to announce the death of a valued contributor to our columns in the person of Dr. Alfred Swann, the medical officer of health for Batley. On May 31st he attended at the House of Lords to give evidence in connexion with the Don water scheme, and upon his return home expressed himself as feeling ill. On June 4th paralysis supervened, and he lapsed into unconsciousness, from which he never recovered. He expired on Thursday, June 6th, the cause of death being cerebral hæmorrhage. Dr. Swann at the time of his death was forty-four years of age. He received his early education at Rawdon Friends' School, after which he studied medicine in Birmingham and at University College, London. He settled at Batley in 1880, and at once began to interest himself in sanitary questions. The health of the town was at that time in a very low state, and the main cause of this was traced by Dr. Swann to the town water-supply being largely contaminated with lead. In 1884 he was appointed medical officer of health, and so was enabled to carry out reforms which he had long foreseen were necessary, though, like all reformers, he was hindered by those who considered, rightly or wrongly, that their interests were being attacked. He held many other appointments, such as certifying factory surgeon, surgeon to the police and Volunteer forces, as well as to the Great Northern Railway Company. He was a true friend to his patients, and ever ready to contribute with his purse as well as with his knowledge to the welfare of the poorer class who sought his advice. He contributed many interesting and valuable papers to our columns, notably communications on Lead Poisoning and various ophthalmic and surgical subjects.

JOSEPH MILLS, M.R.C.S. ENG.

ALL old St. Bartholomew's men, and many of the profession not connected with that hospital, will hear with regret of the death of Mr. Joseph Mills, formerly anæsthetist to the hospital. For some time past he had been in failing health, and a pathetic circumstance connected with his death (which occurred on May 29th at Andover) was that the day before, his wife, who had nursed him devotedly and never left him for eighteen months, came up to town for the day, "because he was so much better." He was the son of the late Robert Mills of Inkpen, and was educated at Andover and Weymouth. He commenced his medical studies at Winchester as a pupil of Dr. Richards, and afterwards entered at St. Bartholomew's, where he became house surgeon to the late Sir William Savory. He was appointed anæsthetist in 1875 and resigned in 1893. His health failed somewhat in 1886–87, but not until 1888 was any serious mischief discovered. It was then found that he had apical trouble, with some pleuritic effusion. He rapidly improved under treatment and spent the winter at Davos. On his return to England in April, 1889, he was in excellent health, and in spite of an attack of influenza in 1890, he continued in good health until the end of 1892, when he began to suffer from cough. In the spring of 1893 he gave up work and retired to Andover. During the last two years he led the life of an invalid, but he was always bright and cheerful, and was much delighted to see any of his old friends. He died quite suddenly on May 29th from pulmonary hæmorrhage. He leaves a widow and one daughter. Of his unvarying kindness and courtesy as a teacher the writer of this brief and imperfect notice can speak from personal knowledge, and though for some years he had retired from active work his memory is green in the hearts of all who knew him.

ROYAL INSTITUTION.—A general monthly meeting of the members of the Royal Institution was held on Monday afternoon [the 10th inst.], Sir James Crichton-Browne presiding. The following were elected members: Mr. Benjamin Bennett, Mrs. Henry Burton Buckley, and Mr. William Watson Cheyne, F.R.S. The special thanks of the members were returned to the Right Hon. Lord Playfair for his donation to the fund for the Promotion of Experimental Research at Low Temperatures.

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

OUR report of the session of the Council published in last week's issue carried the proceedings to the close of Wednesday, June 5th—that is to say, the eighth day of the session. The Council met again on Thursday, June 6th, when, greatly to the relief of the members it succeeded in getting to the end of its work.

The New Edition of the Pharmacopœia.

The PRESIDENT presented the report of the Pharmacopœia Committee. It stated that applications for information bearing on the production of the new edition of the British Pharmacopœia had been sent to twenty medical authorities, and that from sixteen of these communications of great value had been received. The Therapeutic Committee of the British Medical Association had sent in a memorandum furnishing important information as to the frequency with which a considerable number of official drugs and preparations are used by the members of that association. The Pharmaceutical Society had supplied the committee with an instructive report and statistics, and Mr. Martindale had forwarded a pamphlet in which the number of times certain drugs and preparations appear in 12,000 prescriptions was stated. Many communications had also been received from the colonies and India which had been summarised by Professor Attfield. Dr. Tirard had consented to act as secretary to the Pharmacopœia Committee. The committee propose to invite Mr. Thisleton Dyer, C.M.G., F.R.S., and Mr. Holmes to act as referees in botany, and to ask Dr. Thorpe, F.R.S., to act as referee in chemistry, or Dr. Russell, F.R.S., if Dr. Thorpe be unable to accept the invitation of the committee. The Pharmaceutical Society of Great Britain have, at the request of the General Medical Council, appointed a committee of pharmacists to assist the Pharmacopœia Committee in the work of revision. In pharmacology and therapeutics Dr. Lauder Brunton, Professor Fraser, and Professor Walter Smith will be requested to act as referees. The Pharmacopœia Committee have already held three meetings during the present session of the Council, and, in order to deal adequately with the materials before them, and to consider the preparation of the first draft of the new Pharmacopœia, the committee propose to hold a meeting in London towards the end of July.

Dr. HERON WATSON asked whether the communications furnished by the various authorities mentioned in the report would be presented to the Council.

The PRESIDENT replied that the communications were of a very satisfactory kind, and should be sent to all the bodies, as well as to members of the Council.

Dr. HERON WATSON recalled to the Council the remit with reference to the £1250 to be paid to Professor Attfield, and asked why there was no reference to the matter in the report of the committee.

The PRESIDENT replied that nothing more had been done with regard to Professor Attfield's salary. Professor Attfield had been hard at work, and it was to him they owed the summaries and condensations of the papers.

Dr. HERON WATSON said he did not doubt that, but he was speaking with regard to the remit and the payment of the £1250.

The PRESIDENT assured Dr. Watson that Professor Attfield would not accept less, and the Committee had appointed him to do the work. He also appealed to the Council to have confidence in the Pharmacopœia Committee.

Dr. HERON WATSON said he did not want to express the smallest want of confidence either in the President, to whom they owed so much, or any member of the committee, or in Professor Attfield, who he believed was the backbone of a great deal of work that could not very well be done by anybody else. All he spoke to was a question of order.

Dr. LEECH moved the adoption of the report, and in doing so referred to some of the work being done by the committee.

The motion, after being seconded by Mr. BRUDENELL CARTER, was adopted.

The Conjoint Professional Examinations of the Royal College of Surgeons in Ireland and the Apothecaries' Hall of Dublin.

Sir DYCE DUCKWORTH, chairman of the Examination Committee, said it was now the duty of the Council to consider one of the most important questions that had ever come before it. It affected the future of one of the medical corporations in the three kingdoms, indeed, he might say its very existence was at stake. It was the first occasion on which any business of the kind had been before the Council since the passing of the Medical Act of 1886. He would explain briefly the state of the case. This Conjoint Board of the Royal College of Surgeons in Ireland and the Apothecaries' Hall of Dublin had now been inspected no less than four times. The Final Examinations were examined twice by the inspector of the Council, together with one of the members of the Council, Mr. Bryant, and on two occasions by command of the Council the whole of the professional examinations of the board were examined by the inspector of the Council together with another member of the Council, Mr. Wheelhouse. The last examination took place in April, and the report had only been out a short time; but the whole matter was now in order, because they had an official letter saying that the Conjoint Board had no reply to make to the observations of the visitor and inspector. As the matter was important he hoped the Council would allow him to read a portion of the report of Mr. Wheelhouse and Dr. Duffey on the professional examinations held by the Conjoint Board in April and May of the present year. With regard to the First Professional Examination, the visitor and inspector said it was a good and satisfactory test. As to the second, they said that the solitary candidate at the examination presented himself for his second re-examination after a lapse of nearly six years since his first re-examination in two subjects of it only—viz., anatomy and materia medica and pharmacy—and, as on the two former occasions on which this examination was reported upon, the examination in both these subjects was commendable. As to the Third Professional Examination, they said that no exception could be taken to any part of it. As to the Final Examination, they had pleasure in reporting an improvement generally in this examination. The only remark that it appeared necessary to make as regarded the examination in surgery, which on the whole was as satisfactory as heretofore, was that at the oral examination no "specimens, wet or dry, casts, models, &c." were used by the examiners, as the regulations laid down for them recommend. At the oral examination in midwifery and gynæcology there were no morbid specimens provided for examination. A similar omission had been noted in the three last reports. The standard of the examination in medical jurisprudence and in hygiene was higher than that at the three previous visitations. The examination in pathology was quite satisfactory, but they question the advisableness of making a practical examination in urine-testing a part of it. Then the visitor and inspector gave the following conclusion—viz.: "We report that the First, Second, and Third Professional Examinations of this Conjoint Board are 'sufficient.' The Final Examination has been improved in many ways. The examination in medicine was a most careful one, and, we believe, was conscientiously conducted. Holding this opinion honestly, and feeling with the examiners that the candidate they examined had a good theoretical knowledge of medicine, we greatly regret we cannot agree with their judgment in passing him on his clinical examination. In it he showed (1) that he could not ascertain with any degree of accuracy the conditions that presented themselves in a well-marked case of unilateral pleural effusion; that (2) he was unable to recognise the presence of albumen in large quantities in a specimen of urine; and (3) that he could not examine urine for sugar. This proved, in our opinion, that the candidate did not possess 'the requisite knowledge and skill for the efficient practice of his profession' (Medical Act, 1858, Sec. xx.). Excellence in the written or oral examination should not be allowed to compensate for failure in the clinical. For these reasons although we have no fault to find with the actual examination itself, the fact that a candidate was passed who exhibited gross ignorance of clinical medicine compels us to report that in medicine the examination was not 'sufficient.' In the other subjects we report that the Final Examination was 'sufficient.'" He would now read to the Council the report drawn up by the Examination Committee. It was to this effect: "The Examination Committee, having discussed the report of the inspector and visitor on the fourth inspection of the entire professional examinations of the Conjoint Board of the Royal College of Surgeons in Ireland and the Apothecaries' Hall of Dublin, and having been officially informed by the representatives of these two bodies that they have no remarks to offer upon this inspection, finds that the examination is declared to be insufficient within the meaning of the Medical Act of 1886 in respect of the subject of medicine, although generally sufficient and in some respects excellent in surgery. The Examination Committee, therefore, has to report to the Council that no one of the four inspections of this conjoint examination has afforded proof of its sufficiency in all its statutory departments. The Examination Committee accordingly recommends the Council to represent the same to Her Majesty's most Honourable Privy Council." This was the conclusion of the Examination Committee. It would be in the remembrance of the Council that upon a former occasion as the result of two inspections the Examination Committee thought itself justified in recommending the Council to represent the state of matters to the Privy Council, but tenderer mercies prevailed, and it was thought that another inspection should be made and more time given to see if amendment was possible. Twelve months more had been allowed to this board. Two more examinations had been held and two more inspections had taken place. He begged to move: "That it appears to this Council that the standard of proficiency in the subject of medicine required from candidates at the qualifying examinations held by the Conjoint Board of the Royal College of Surgeons of Ireland and the Apothecaries' Hall of Dublin, after four special visitations, has been found *insufficient*."

Mr. BRYANT, seconding this, said that it fell to him to visit the Conjoint Board on two occasions. The decision he came to with the inspector on the first occasion was that the examinations in forensic medicine and in hygiene and in medicine could not be regarded as sufficient, and on the second occasion the decision was the same. After reading in the third and fourth reports that the same conclusion was reached he felt perfectly sure that they would be failing in their duty if they did not represent to the Privy Council this very serious state of things.

Mr. WHEELHOUSE said that as he had been engaged in the last two examinations of this Conjoint Board it behoved him to tell the Council his feeling in the matter. He could not but hope on the first occasion on which he visited the examination, judging by the report which had been made to the Council before, that there was a great effort being made to improve it, and he believed that the effort was to a very considerable extent successful. He believed that the third examination was a more perfect one than the first or second, and that at the last one further effort was made in the way of improvement. On reading the last report he thought they would see that they were tolerably well satisfied, except with regard to medicine, and in that connexion there was only one point with them. The question that arose in the mind of the inspector and himself was that a man who showed himself well versed so far as theory was concerned in his medical education, but who knew nothing whatever apparently of practice, should have been passed as a qualified man; and they came to the conclusion that it was a question whether he ought to have been passed or not.

Sir DYCE DUCKWORTH said he thought the Council should have before it the report of the Examination Committee on the report of the inspector and visitor with regard to the examinations in October, 1894. In this report the committee said:—

"The visitor and inspector send in a report on the First, Second, Third, and Final Examinations of this board as held in October, 1894, and express the opinion that the First, Second, and Third of these Examinations are good and satisfactory tests. The Final Examination generally has been much improved since the last report, but the Examinations in medicine, forensic medicine, and hygiene are not considered 'sufficient.' The oral examination in gynæcology was imperfect, and it is recommended that pathological specimens illustrating the diseases of women should in future be employed. New regulations have been made, but some of the examiners were not fully acquainted with them. The First Examination may be passed in piecemeal fashion. The examination in osteology may be passed at the end of the first winter session, but the questions are considered somewhat difficult for a student of anatomy who has had only one such session of study. The examiners in each subject set their own papers, but these are not, as they should be, subsequently submitted to the whole board. Only three out of six questions have to be answered. The Second Examination may also be passed in piecemeal fashion. The written examination for the second part revealed some amazing ignorance and unpreparedness on the part of the candidates, the like of which the visitor and inspector had never before met with. The same remarks apply to the oral examination in

hospital practice, anatomy, physiology, and materia medica. In practical physiology and histology the examination, while adequate as far as it went, was incomplete. The representatives of the Royal College of Surgeons on this Conjoint Board send in a separate report in reply to the report of the visitor and inspector, and state that no part of the examination conducted by the examiners appointed by them has been reported on as unsatisfactory. They hold aloof from their colleagues of the Apothecaries' Hall, and answer only such charges of irregularity as apply to the examiners of their College. This is a new departure, which the Examination Committee trusts may not be followed by any other Conjoint Board. It is alleged that the visitor's and inspector's reports are 'most unfair,' because they give details of bad answering on the part of unsuccessful candidates. But it appears that the liberal marking of unworthy candidates went very near allowing them to pass, and the Council requires a report upon the methods pursued in each examination which is inspected. The College of Surgeons' representatives further express regret that the visitor's and inspector's reports are not written in a more 'judicial' tone. The Examination Committee, however, would remind the General Medical Council that that body desires, and is accustomed to receive, reports, and not judicial utterances, from its visitors and inspector, and reserves to itself alone the power to pronounce '*judicially*' upon such reports. Reviewing the whole evidence forthcoming from the several inspections of this board, the Examination Committee desires to express its opinion that, while recognising the efforts which have been made to comply with the recommendations of the General Medical Council by the Conjoint Board, the results are still unsatisfactory."

Sir PHILIP SMYLY, the representative of the Royal College of Surgeons in Ireland, then addressed the Council. He began by reading Section 3 of the third clause of the Medical Act of 1886, in which it stated that the General Medical Council shall forward a copy of their inspector's report to the Privy Council. This reporting to the Privy Council had been held *in terrorem* over them, and he desired to point out that all these reports should have been reported to the Privy Council.

Dr. MACALISTER said the report was only completed to-day, and the time had not come to report to the Privy Council.

Sir PHILIP SMYLY replied that he was referring to former reports. He wished to be clearly understood that he made no charges against the Apothecaries' Hall. The Apothecaries' Hall had always met their suggestions very favourably, and had adopted them in nearly every case. The examiner in medicine must be a hospital physician—that was to say, practically a Fellow of the Royal College of Physicians; and the defects in the examination were accounted for by the systematic boycott instituted by the Royal College of Physicians, which he left his colleague, Dr. Charles Moore, to explain.

Dr. ATTHILL, who represents the Royal College of Physicians of Ireland, said he thought "boycott" a most improper word to use.

Sir PHILIP SMYLY undertook to justify its use. There were three divisions of the word "boycott." One was the method that was adopted in Ireland of putting a bullet through a man; that, as the Kerry man said, precluded a man from holding land for the rest of his life. The second method was that of shooting him in the legs and making him so uncomfortable that he would not hold land. The third method was to starve him out and not allow him to trade or deal with anybody. The first method was performed by the Royal College of Physicians when it issued an injunction from the Court of Chancery prohibiting them from holding the conjoint examinations at all. That was analogous to shooting, but fortunately, as often happened in Ireland, they missed. The second method, of shooting in the legs, was paralleled by the charges which were brought against the Conjoint Board for irregularity. They tried to frighten the board out of their lives by all these charges. These also in a measure fell to the ground. As to the third method, the Royal College of Physicians had carried out a cruel system of starving. The report of the Examination Committee was hardly fair. If members looked through the reports furnished by the inspectors they would find that they obeyed the instructions of the Medical Act and used the two words "sufficient" and "insufficient." In last year's report the inference to be drawn from the advice given was that the Royal College of Surgeons should withdraw from the Conjoint Board. The words were: "The Examination Committee think it would be very desirable that the General Medical Council should suggest to the Royal College of Surgeons in Ireland the propriety of severing their connexion with a board whose proceedings can be thus described." The Royal College of Surgeons promptly acted upon this advice and gave the legal notice, and the Conjoint Board would cease to exist next month. Referring to Mr. Wheelhouse and Dr. Duffey's report, he said there was no word of censure upon the surgical side of the board, and he submitted that the portions of the examination conducted by the Royal College of Surgeons had not been such as to require this Council to report the examination as a whole, and without any explanation or qualification, to the Privy Council, thereby inflicting an injury to the reputation and prestige of one of the oldest Royal Colleges of Surgeons in the empire. He submitted to the Council that the Royal College of Surgeons in Ireland came out of this matter with clean hands.

Dr. CHARLES MOORE, the representative of the Apothecaries' Hall, then addressed the Council. It was hardly fair, he said, to condemn a body for a particular branch, all-important though it might be, when they were deprived of the means of seeing to that particular branch. Repeated instances had come before him of gentlemen being asked to carry on the medical examination in Dublin and declining. The reason given either directly or indirectly was fear of the displeasure of the Royal College of Physicians. He was glad to say that it was not, properly speaking, the Royal College of Physicians who were at fault, but merely what was called the Young Ireland Section of the College, who were in a majority in a matter of this kind. He had to complain of some of the criticisms offered. He objected to the term "piecemeal," and he complained that the reports of the visitor and inspector were not written in a more judicial tone. Moreover, when the inspector undertook to cross-examine the examiner he thought he went altogether *ultra vires*. As to the position of the Apothecaries' Hall, he might say that its members, about 900 in number, were scattered throughout Great Britain and Ireland and the colonies, and were among the ablest and most esteemed members of the medical profession. Dr. Atthill had spoken about "the scum," but he thought the expression uncalled for and altogether inapplicable. As to the unfortunate student referred to in the report, he took it that he was frightened, for he had passed very successfully the written and theoretical examination.

Mr. WHEELHOUSE denied that Dr. Duffey interfered with the examination or the work of the examiner.

Mr. BRYANT offered a similar denial.

Dr. ATTHILL said that the remarks of Sir Philip Smyly and Dr. Charles Moore made it necessary for him to speak on an occasion when he had desired to remain silent. It was true that the Royal College of Physicians did not consider the Apothecaries' Hall a medical corporation in the proper sense of the word, and that they had tested the right of the Apothecaries' Hall to be so considered by taking proceedings in the Court of Chancery. The decision went against his College. Their counsel—very eminent men—told them without any hesitation that they ought to appeal, but so far from wanting to persecute or give unnecessary trouble they said if the bodies kept up a good standard of examination they would not proceed further in the matter. This Council a year ago took proceedings against the Royal College of Physicians of London for its giving a licence under its Charter. Was that boycotting the Royal College of Physicians of London? He was surprised at Sir Philip Smyly using such a simile. Then he charged the Royal College of Physicians of Ireland with boycotting them by bringing forward before this Council irregularities. These irregularities were accepted by the committee and accepted by the Council.

Dr. KIDD suggested that it was waste of time to proceed with this debate, having regard to the fact that the Conjoint Board ceased to exist on July 1st.

Sir DYCE DUCKWORTH thought the debate should proceed, his opinion being that it was most instructive and useful.

Dr. ATTHILL proceeded with his speech. He related to the Council certain information which had reached him with regard to what took place at examinations of the Conjoint Board, and asked whether it was for his College to remain quiet and allow a system to go on which was a disgrace to Ireland, a disgrace to Great Britain, and, above all, a disgrace to this Council. He had used the word "scum" accidentally, and he apologised for having used it to the extent of substituting "refuse." These men were the refuse of the medical schools of Great Britain and Ireland, and he stuck to his terms, no matter whether he gave offence or not. It was said that his College had prevented their Fellows from examining for the Conjoint Board, and, speaking with perfect knowledge of all that went on in the College, he absolutely denied this. In support of his denial Dr. Atthill read to the Council a number of letters from Fellows, one of whom had actually examined for the Conjoint Board. In conclusion, he denied that there had been anything like a boycott, or an attempt at such a thing.

Dr. CHARLES MOORE said he had a letter from a Fellow who declined to act because he feared the displeasure of his College.

Sir JOHN BANKS said that if the condemnation which had been pronounced upon this examination was complete he should not have one word to say in mitigation of the severe punishment which it was proposed to inflict upon the Conjoint Board. But it was not complete. He could not therefore vote for the proposal to go before the Privy Council.

Dr. HAUGHTON said that as a Fellow of the Royal College of Physicians of Ireland he would be very far from going so far as to use the term "boycott" to the College; but there was what he must call not a friendly feeling between the College and the Apothecaries' Hall. He, as a Fellow of the College, dissociated himself entirely from that unfriendly feeling.

The motion was then put to the Council and carried by 17 votes to 4.

Sir DYCE DUCKWORTH, seconded by Mr. BRYANT, moved: "That in accordance with Section IV. (1) of the Medical Act (1886), the General Council do now make a representation to that effect to the Privy Council."

Dr. KIDD moved an amendment the effect of which was that, as the Conjoint Board was now practically defunct, it was unnecessary to proceed to the Privy Council.

Sir PHILIP SMYLY seconded this amendment.

Dr. MACALISTER said he did not think the Council had any option in the matter, having once decided that the examination was insufficient.

Sir PHILIP SMYLY pointed out that last year a resolution not to inflict this penalty was carried.

Dr. MACALISTER agreed that the Council could choose its time, but the present proposal was that the Council should never make the representation.

Sir WILLIAM TURNER said that this point had been submitted to their legal adviser, Mr. Muir Mackenzie, whose advice was that they were not bound last year to make the representation to the Privy Council at that particular meeting. The Council came to the resolution to defer making the representation, and it ordered further inspection of the examination. There had been farther inspection, and he for his part felt they were bound now to comply with the injunction in Section 4 of the Act.

It was agreed not to press the amendment, and on the motion of Sir Dyce Duckworth being put it was carried by 20 votes to 4.

Sir DYCE DUCKWORTH moved: "That, pending the consideration by the Privy Council of this representation, the General Council come to no decision on the application by the Apothecaries' Hall of Dublin, of Nov. 23rd, 1894, to appoint two Examiners in Surgery under the provisions of the Medical Act (1886)." He thought it would be agreed that in the circumstances it would be premature for them to exercise the privilege invested in the Council of appointing examiners as asked.

Mr. BRYANT seconded the motion.

Sir WALTER FOSTER said that Dr. Charles Moore, as representing the Apothecaries' Hall, was quite willing to allow this resolution to pass and not to press for the appointment of examiners this session. Pending the decision of the Privy Council, it might be unwise to come to any vote in this Council.

Sir WILLIAM TURNER asked if they were to understand that Dr. Charles Moore withdrew the letter of application. If he did withdraw it Sir Dyce Duckworth's resolution must drop.

Dr. CHARLES MOORE thought the most suitable course to adopt in the circumstances was to request leave to withdraw the letter of application pending decision of the Privy Council on the representation that was to be made to it.

Leave was given, and the subject dropped.

The letter in question was from the Secretary of the Apothecaries' Hall of Ireland, and stated that the Governor and Court of Directors of the Hall at a meeting on Nov. 23rd, 1894, "resolved to petition the General Medical Council to appoint two examiners in surgery under the provision of the Medical Act, 1886, as their conjunction with the Royal College of Surgeons will cease in July, 1895. When permission is granted the court will be prepared to submit two names for approval of the Council, or receive two names from the Council if so directed."

Report on Qualifying Examinations.

Sir DYCE DUCKWORTH, as chairman of the Examination Committee, said that as the cycle of three years' inspection had now been completed, the Examination Committee had considered their "Report on the Visitation and Inspection of the Final Qualifying Examinations of the Universities and Licensing Bodies of the United Kingdom." That committee represented that:—

"The whole of the Final Examinations of the several universities and licensing boards in the three kingdoms having now been visited and inspected, the Examination Committee begs leave to offer the following report upon them as a whole. The committee is pleased to find that these examinations are, with one exception, deemed to be 'sufficient' within the meaning of the Medical Act of 1886. In most instances the criticisms of the visitors and inspector have been kindly received, and many defects pointed out have already been acknowledged and rectified. While taking note of the general sufficiency of these examinations, the committee must state that the standard, as might be expected, is found to vary in different institutions. We can never expect absolute uniformity to prevail amongst bodies so widely different in character as are the seventeen universities and conjoint boards of the medical corporations in the three kingdoms. We look for distinctly higher standards in the cases of all the universities granting degrees in medicine, surgery, and obstetrics, but even among them it is not possible to institute exact comparisons. The profession no less than the public is now, with one exception, adequately protected against the admission of imperfectly trained practitioners into the ranks of medicine, and it is also distinctly true that the standard of qualification has been materially raised in every licensing body within the last twenty years. The Examination Committee finds evidence of imperfect early education on the part of many candidates who ultimately become members of the profession, and strongly urges that more strenuous efforts than have hitherto been attempted may be made to secure a higher standard of general education before registration as a medical student is permitted. The Examination Committee takes note of a frequently repeated criticism as to the advisability of requiring, in addition to the ordinary examination of cases, a written report on at least one medical and surgical case in the clinical portion of the examinations. The committee recommends this test to be employed when it can be efficiently carried out. The number of cases of midwifery on which attendance is required is in some instances too few, so small a number as six being considered adequate by some boards. In reply to unfavourable comment upon this matter, these boards declare that it is impossible to provide for a larger number being attended. It is manifestly not easy to find a remedy for this condition, but the Examination Committee is unwilling to believe that the difficulty is insuperable. If the local provision for midwifery instruction in the educational centre itself is inadequate the necessary knowledge could surely be secured elsewhere, under the competent supervision of a registered practitioner, or in a lying-in institution, and certificates be produced of attendance on a large number of cases. The Examination Committee suggests that the Council should consider the propriety of issuing a recommendation to this effect. A more frequently reiterated complaint is made by the visitors and inspector respecting the failure to institute any dependable test in operative surgery. Some boards declare their inability to carry out this test by reason of insufficient supply of material for the purpose. It is manifestly unwise to urge this examination on licensing bodies which are willing, but which, on account of the restrictions imposed by the Anatomy Act, are absolutely unable to conduct it, and the Examination Committee is of opinion that the Council cannot for the present proceed further in pressing this matter upon the attention of the bodies concerned. It is pointed out by the inspector that many of the examining boards hold no special examination in ophthalmic or in aural surgery or in skin diseases. In other cases it appears that candidates are thus tested in the course of the several surgical examinations. The General Medical Council has hitherto made no recommendation respecting special examinations in these subjects. The Examination Committee sees a difficulty in urging the Council to make more specific recommendations on these points, since such a course might lead to the introduction of other tests in special subjects to a burdensome degree. The curriculum of study is now so loaded and the requirements in examinations so detailed and onerous, that it appears advisable to exact nothing further at the present juncture. It might suffice to indicate to the several boards that the Council expects the subject of ophthalmology to form part of the examination for a qualifying licence to practise, and that candidates should be also examined, as far as practicable, in their knowledge of skin diseases. The Examination Committee, by way of summary, would ask the Council to emphasise the desirability of all the examining bodies observing the following points:—

"1. The maintenance of fixed intervals of time between the several examinations. It is desirable that two years at least should intervene between the examination in anatomy and physiology and the final examination in medicine, surgery, and midwifery.

"2. The error of sanctioning the extreme subdivision of examinations, and particularly the final, as now permitted by the English, Scottish, and Irish Conjoint Boards.

"3. Questions in all the written examinations of the different bodies should be submitted to the whole of the examiners under each subject before they can be set at any examination.

"4. The careful supervision of the candidates in all their examination work.

"5. The justice of allowing at least half an hour for a candidate to answer each question in the papers on medicine, surgery, and midwifery.

"6. The rule that no candidate should be examined in any subject or part of a subject, except in the presence of two examiners.

"7. The necessity of the clinical examinations in medicine and surgery being conducted under the personal surveillance of an examiner, who should always examine the candidate orally on each case, although the adoption of this rule might in practice necessitate in some boards additional clinical examiners.

"8. That there should always be an examination in the testing of urine and other secretions, in microscopy, and in prescription-writing, and always an oral examination in both medicine and surgery, which should include the recognition of pathological specimens.

"9. That at every final examination there should be a practical examination in pathology, macroscopic and microscopic, unless this has been included in the examination immediately preceding the final examination.

"10. The examination in midwifery, forensic medicine, and hygiene should be made as practical as possible.

"11. Whatever the system of marking may be, the percentage for a pass (50 per cent.) should be uniform in all the boards and in accordance with the recommendations of the Council. The marks given on the

written examination ought not, as is the case with some boards, to dominate those given at the oral and clinical examinations. The recommendation of the Council that knowledge of one subject should not be allowed to compensate for ignorance in others is not sufficiently regarded by some of the examining bodies. Marks given in any part of an examination should be given on the merits of that part alone, and not be subject to future revision unless for the correction of a manifest error.

"12. That as the art of examining is only to be acquired by practice, it is desirable that an examiner should be re-elected where practicable for at least five consecutive years, particularly for the Final Examination."

These, said Sir Dyce Duckworth, were the results that came out from the inspection of the Examining Boards of the three kingdoms, and he proceeded to read an appendix to the report, which appeared to show that among the candidates who have presented themselves to the several Examining Boards there have been some whose ignorance has been such as to render it incredible that they should ever become competent and trustworthy medical practitioners. The committee thinks it highly desirable that such persons should be altogether excluded from the ranks of the medical profession, and recommends the Council to seek the coöperation of the several licensing authorities for this purpose. He moved that the report be received and entered on the minutes.

This was seconded by Mr. WHEELHOUSE and agreed to.

Dr. BATTY TUKE asked if it was contemplated that this report was to be considered during the current session.

Dr. MACALISTER thought the committee's conclusions were very important, and he suggested that they should be drawn up in the form of "recommendations" by the Council for consideration next session.

The PRESIDENT: The bodies should have an opportunity of sending any representations in regard to them. Do you propose to send them to the bodies?

Sir WILLIAM TURNER and others: No, no.

Dr. MACALISTER: They deserve to be permanent recommendations.

Sir WILLIAM TURNER: But they cannot now be sent to the bodies, because the Council may alter them.

Dr. MACALISTER: Then I move "That the Examination Committee be instructed to prepare for the consideration of the Council at its next session, in November, a series of specific recommendations embodying the results set forth in the summary to their report."

Dr. MCVAIL seconded this proposal.

Dr. PETTIGREW: I hope that we shall not separate without doing something with these recommendations. Let us sit to-morrow and finish with the matter when it is fresh in our minds.

Professor GAIRDNER was willing to adopt this procedure.

Mr. BRUDENELL CARTER felt that they were in a better position to deal with these matters at once than they would be six, possibly twelve, months hence.

Sir WALTER FOSTER urged that they were at the fag end of a long session, that what was wanted was the opinion of those who were not familiar with all the details rather than that of those who were, and that consideration of the report should be postponed.

Dr. PETTIGREW moved that the Council deal with the report on Friday and subsequent days.

Professor GAIRDNER seconded this amendment.

Sir DYCE DUCKWORTH said there was no doubt that if the general pronouncements of the committee were adopted they would be an exceedingly valuable guide to the examining bodies of the country. The subject was one of the most important parts of the work for which the Council met, and even now they were at least six months behind with it. It would be a great satisfaction to get it out of hand. They wanted to clear the way because there was the inspection of preliminary examinations, which should have commenced before this time. Many of them understood the details very much better now than could be expected of them six months hence.

Mr. TEALE thought that if the recommendations were important they were too important to discuss at the fag end of the session.

Dr. GLOVER suggested that it would not be quite respectful to the committee to go on now. Considering the value of the report it should be postponed till next session and then be taken as the first business.

The PRESIDENT was of opinion it would be premature to force on a discussion now.

On a division the amendment had only six supporters, and Dr. MacAlister's motion was then put and unanimously agreed to.

Public Health Examinations.

The next business was that of receiving reports from the Examination Committee on the inspection of examinations in sanitary science of the following bodies: (*a*) the Conjoint Board in England; (*b*) the University of London; (*c*) the Conjoint Board of the Royal Colleges of Physicians and Surgeons in Ireland; and (*d*) the University of Dublin.

Sir DYCE DUCKWORTH proposed that all these reports and the similar reports presented to the Council at their session in November last, together with the provisional reports thereon prepared by the Examination Committee, should be referred to the Public Health Committee for consideration and report. He was happy to congratulate the chairman of the new committee, whoever he might be, on the fact that the reports that were being handed over were all brought up to date, for the Examination Committee had prepared a report on each of the reports of inspection.

Dr. BATTY TUKE seconded the motion, which was agreed to.

The Public Health Committee was then nominated as follows: Dr. Thorne Thorne, Dr. Batty Tuke, Sir Philip Smyly, Mr. Teale, Dr. Cameron, Dr. W. Moore, Dr. Church, Dr. McVail, and Dr. Haughton.

Dental Examination.

The new Dental Education and Examination Committee was nominated as follows: Mr. Carter, Mr. Bryant, Dr. Cameron, Sir Philip Smyly, Dr. Fraser, and Dr. Chas. Moore.

Registration of Students.

Sir DYCE DUCKWORTH presented a report from the Students' Registration Committee. He said it contained no matter that would excite attention—the work of registration was almost automatic.

The report was received and entered on the minutes.

The Pharmacopœia.

The PRESIDENT moved that the Council should place £2000 at the disposal of the Pharmacopœia Committee for the purpose of enabling them to proceed with the work of producing a new edition of the Pharmacopœia.

Dr. MACALISTER seconded the motion.

Dr. HERON WATSON suggested that the sum should be £3000.

Modified in accordance with this suggestion, the motion was agreed to.

A vote of thanks was then, on the motion, of Sir JOHN BANKS, accorded to the President, and this brought the proceedings of the session to an end.

Medical News.

FOREIGN UNIVERSITY INTELLIGENCE.—*Bologna:* Dr. S. Salaghi has been recognised as *privat-docent* in Therapeutics.—*Bonn:* Dr. E. Schultze has been recognised as *privat-docent* in Neurology and Psychiatrics.—*Halle:* Dr. F. Hasaler has been recognised as *privat-docent* in Surgery.—*Leipzig:* Professor J. von Kries of Freiburg, a former assistant of Professor C. Ludwig, has been appointed to succeed him in the chair of Physiology. Dr. R. Kockel has been recognised as *privat-docent* in Pathological Anatomy.—*Marburg:* Dr. E. Behring has been promoted to the rank of Ordinary Professor of Hygiene. Dr. W. von Sobieranski has been recognised as *privat-docent* in Pharmacology.—*Vienna:* Drs. Chvostek, Max Herz, and Norbert Ortner have been recognised as *privat-docenten* in Medicine, Dr. Salzmann as *privat-docent* in Ophthalmology, and Dr. Réthi as *privat-docent* in Laryngology.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—At the annual general meeting of this society held on Monday, June 10th, the following were elected office-bearers for the year 1895–96:—President: David Hepburn. Vice-Presidents (resident): Ashley Gibbings, John Fairbank, C. J. Boyd Wallis; (non-resident) W. E. Harding (Shrewsbury), George Henry (Hastings), and J. F. Cole (Ipswich). Treasurer: S. J. Hutchinson. Librarian: W. A. Maggs. Curator: Storer Bennett. Editor of Transactions: Edward Lloyd-Williams. Honorary Secretaries: J. H. Mummery (foreign), J. F. Colyer (council), and Clayton Woodhouse (society). Councillors (resident): C. E. Truman, W. R. Humby, W. B. Paterson, Harry Baldwin, John Gartley, Cornelius Robbins, Sidney Spokes, Alfred Smith, G. D. Curnock; (non-resident) G. G. Campion (Manchester), J. McKno Ackland (Exeter), J. H. McCall (Leicester), T. Arkövy (Budapest), A. W. W. Baker (Dublin), F. E. Huxley (Birmingham), Geo. Cunningham (Cambridge), C. B. Mason (Scarborough), and J. J. Andrew (Belfast).

THE triennial festival dinner in aid of the funds of the Royal Maternity Charity, of which the Queen is patron and the Duke of Argyll president, took place on Wednesday night at the Albion Tavern. Dr. Robert Barnes presided, and the Secretary reported that during the evening donations and subscriptions had been received amounting to about £800.

SIR JAMES CRICHTON-BROWNE, M.D., LL.D., F.R.S., will preside at the distribution of prizes to the Stepney Jewish Schools, to be held at the Queen's Hall, People's Palace, Mile End-road, on Monday next, at 7 30 P.M. The prizes will be distributed by Mrs. Adler, wife of the Chief Rabbi, and the proceedings will conclude with a gymnastic and calisthenic display by the pupils.

BATHING FATALITIES.—Although the bathing season has only recently commenced, many fatalities have already occurred. In the past few days—namely, during Saturday, Sunday, Monday, and Wednesday last—in the suburbs of London and the provinces, no less than fourteen boys and young men, and two men have lost their lives while bathing. Of the former it would appear none could swim, and of the latter, both men were seized with cramp, suddenly disappeared, and were drowned. At each recurring bathing season similar casualties occur, and are a striking testimony of the prevailing neglect of the art of swimming and emphasise the necessity of calling public attention to the fact.

AT a meeting of the Society for the Study of Inebriety held on the 6th inst., the President, Dr. Norman Kerr, in the chair, it was resolved to memorialise Government to propose legislation, on the lines recommended by the Scotch Departmental Committee on Habitual Offenders, for the compulsory curative detention of habitual drunkards, for provision for the poor, and for the extension of the definition of "habitual drunkard" in the Inebriates Act of 1879 to excessive users of morphine and other drugs. The thoroughness of the inquiry was highly commended, and special mention was made of the three members of the committee having a medical qualification—the chairman, Sir Chas. Cameron, M.P., Dr. Farquharson, M.P., and the secretary, Dr. J. F. Sutherland. Surgeon-Major Pool, Dr. David Walsh, Mr. Hazell, and others took part in the discussion.

PRESENTATION.—At the meeting on the 7th inst. of the general committee of the General Hospital at Birmingham, which was also well attended by friends, Dr. W. F. Wade was presented with a testimonial in recognition of the valuable services rendered by him as physician to that institution. Mr. F. Everitt presided. Mr. J. B. Clarke (chairman of the Testimonial Subcommittee) stated that 106 subscribers had contributed, and the sum available was £261 11*s.* 6*d.* A silver tea-tray had been selected by Dr. Wade, on which was engraved the following inscription:—"Presented, with a cheque for £196 11*s.* 6*d.*, to Willoughby Francis Wade, M.B., F.R.C.P., on his retiring from the office of physician to the Birmingham General Hospital, which he had filled for twenty-seven years, as a token of appreciation of his valued services to the institution. The cheque was generously given by Dr. Wade to the building fund of the New General Hospital. June 7th, 1895." The chairman, on making the presentation, stated that Dr. Wade's services to the medical charities of the city covered a period of forty years.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

The Whitsuntide Recess.

THE House of Commons, after a recess of exactly a week, resumed its session on Monday, June 10th. The House of Lords takes a recess of a little over a fortnight and will resume on Monday, June 17th.

The Factories and Workshops Bill.

In the present state of the law boys over thirteen possessing the necessary educational certificate can be employed at night in paper mills, ironworks, blast furnaces, and letterpress printing works, and in this Bill the Government proposed to raise the age to sixteen years. When the proposal was discussed in the Grand Committee on Tuesday, June 11th, Mr. Matthews, Sir Arthur Hickman, Sir J. Joicey, Mr. Whiteley, and a number of other members expressed objection to it, and as a compromise Mr. Asquith arranged to take the age of fourteen years as the limit, and to give the Secretary of State power to impose certain conditions as to the night work, conditions as to ventilation, hours worked, &c.

The Diseases of Animals in Ireland.

The Veterinary Department in Ireland has issued a report for 1894 with reference to the diseases of animals. The diseases with respect to which special powers are conferred by statute on the Lord Lieutenant and Privy Council in Ireland are cattle plague, pleuro-pneumonia, foot and mouth disease, and swine fever, but anthrax, rabies, glanders or farcy, sheep-pox, and sheep-scab are also dealt with under an Act passed last year and by Orders in Council. The Veterinary Department report that no case of cattle plague has occurred in Ireland since 1866, no case of pleuro-pneumonia since 1892, and no case of foot and mouth disease since 1884. Twenty-eight cattle were slaughtered as suspected of pleuro-pneumonia, but the post-mortem examination of the lungs by the officers of the department showed that the disease did not exist in any of these cases. The principal work of the department during the year had been connected with swine fever which had been prevalent in Ireland and caused serious losses. During the ten months of the year 1893 prior to Nov. 1st, when the Swine Fever Act came into force, only 196 outbreaks of the disease were reported in all Ireland, while in the fourteen months from Nov. 1st, 1893, to Dec. 31st, 1894, no less than 12,657 separate cases had been reported. In a large proportion of these reports the inspectors of the local authorities on visiting the places found that no disease existed; in many others when a suspected pig was slaughtered the post mortem examination showed that the affection was not swine fever, but in 7929 instances the outbreak was confirmed by the examination of the viscera by the veterinary officers of the department. As to anthrax, only five outbreaks were reported in 1894 as compared with twenty-two in 1893, while as to glanders or farcy thirteen outbreaks were reported. The cases of rabies reported were 779 in number, or 355 more than in 1893. The report says in this connexion that the provision of the Rabies (Ireland) Order of 1894 authorising local authorities to pay compensation for animals suspected of rabies that are slaughtered by their direction has probably led to an increase in the number of reports, and that there is strong reason to believe that in a large proportion of the cases reported the animals were not really affected with rabies.

HOUSE OF COMMONS.

MONDAY, JUNE 10TH.

The Irish Prisoners at Portland.

Mr. William Redmond asked the Home Secretary whether Gallagher and others of the Irish prisoners at Portland were suffering from excessive ill-health, and, if so, whether he would order a special medical inquiry to be held. Mr. Asquith, in reply, said that all the prisoners referred to, with the exception of John Curtin, were now in good health. The prisoner Gallagher was admitted into the hospital for anæmia on May 1st. He was discharged from the hospital on the 30th, having gained 4 lb. in weight and expressing himself as very well. The prisoner Curtin was at present in the hospital, and he had had a special inquiry made by Dr. Gover into his condition. He showed some improvement and his case was being carefully watched.

TUESDAY, JUNE 11TH.

The Condition of Aldershot Camp.

Mr. Alpheus Morton asked the Secretary of State for War whether several officers had been seriously ill caused by the insanitary condition at Aldershot; whether he was aware that they or their friends had been put to large expense in obtaining private medical attendance, and would he explain on what grounds the War Office refused to pay these expenses.—Mr. Campbell Bannerman replied that among the cases that had occurred at Aldershot among officers only those of enteric fever could be caused by insanitary conditions, and of this disease only four cases had occurred since Nov. 1st last. The origin of the disease was in all cases stated to be doubtful. Any officer whose illness was distinctly traced to the insanitary condition of his official quarters was indemnified for any medical expenses he might incur when an army medical officer was not available.

The Army Medical Staff in India.

Mr. Alpheus Morton asked the Secretary of State for India whether his attention had been called to the condition of the Army Medical Staff in India; whether the Medical Department was terribly undermanned; and, whether adequate arrangements was made for a reserve in case of emergencies like the Chitral Expedition.

Mr. Henry Foster replied that the establishment of the Army Medical Staff in India was considered sufficient for the requirements of the Army in peace and war, and there was no reason to suppose that it was "terribly undermanned," as assumed by his hon. friend.

Summer Clothing for the Police.

Mr. Asquith, in reply to a question put by Mr. Snape whether, as an example to the municipal and county constabulary authorities throughout the country, arrangements could be made to promote the comfort of the Metropolitan Police by supplying them with lighter clothing during the hot summer months, said that the matter had been frequently considered, and the opinion of the Commissioner and of the Chief Surgeon of the police was averse to the proposal. He undertook, however, to obtain a fresh report on the subject.

WEDNESDAY, JUNE 12TH.

Funeral Expenses of Children Bill.

On the motion of its sponsor, Sir Richard Webster, this Bill was withdrawn after having reached the Committee stage. The principal provision of the Bill was aimed at the insurance of children under two years of age, and Sir Richard Webster, in asking leave to withdraw the measure, said he had not sufficiently considered the interests of some of the best of the friendly societies. Mr. Abraham took the opportunity to condemn the Bill as an outrage on the feelings and aspirations of the working-classes. Several members suggested that there should be an inquiry before legislation on this subject was again attempted.

IN COMMITTEE.

Food Products Adulteration.

The Select Committee of the House of Commons on the Adulteration of Food Products, of which Sir Walter Foster is chairman, met on Wednesday, June 12th, and resumed the examination of witnesses.

Mr. John Williams, President of the Grocers' Association of Manchester and Salford, said that in 1892 there were a good many complaints about the fraudulent sale of margarine in Manchester and a vigilance committee was appointed to see to the matter. With the assistance of a solicitor they got up a number of prosecutions, but they received very scant encouragement from the authorities. In two cases a nominal fine was imposed, while in a third the accused person got off, and the Association had to pay costs to the extent of £5. He complained that while the corporation of Manchester authorities bestirred themselves with reference to excess of water in butter, they overlooked serious and systematic fraud in connexion with the sale of margarine. In his opinion, if the magistrate was assured that there had been fraud, he could not impose too heavy a fine, and in order to prevent fraud he would have all margarine sent out in certain shapes. The practice of having two counters, one for butter and the other for margarine, was no protection to the purchaser; on the contrary, it was made a means of fraud. Both butter and margarine should, in his opinion, be sold openly. The invoice should be considered as a warranty, and the person who gave it held responsible. With regard to mixtures of coffee and chicory he objected to the percentages being stated on the label. He thought the present label effective enough, but if he did anything to it at all it would be to prevent the use of other words than coffee and chicory upon it. Reverting to margarine, witness said he would have all margarine sold in oblong or brick-shaped blocks, tied up and marked in a particular way. He would not allow more than 6 per cent. of butter in margarine. It was necessary to make some allowance of butter, because he was informed that in every case there was a certain percentage of butter in margarine. He would have all butter and margarine examined at the port of entry by the officials there, travelling inspectors to visit localities and encourage local authorities to carry out the law, wholesale houses and manufactories inspected, and samples taken at hotels and restaurants.

Mr. William Jennings, President of the Bristol Grocers' Association, gave evidence with regard to coffee mixtures and cocoa, saying that the present labels were a sufficient protection to the public. When people bought coffee at 10*d.* or cocoa at 4*d.* per lb., they knew very well they were not getting pure coffee or pure cocoa. He took the same view with regard to mustard. In the case of pepper and ginger, he thought they should always be genuine, and that there was no need for adulteration. He had no wish to stamp out the trade in margarine, which, he thought, was a necessary article of food for people who could not afford to pay for butter, but he would put some limit on the power of mixing butter and margarine. He would also have inspection at the port of entry and imprisonment inflicted in case of repeated offence. If imprisonment did not stop fraud, then he would prohibit the colouring of margarine like butter.

Mr. Adam Morton Dunlop, President of the Glasgow South-Eastern Grocers' and Provision Dealers' Association, expressed the opinion that prosecutions in connexion with margarine should not be taken under the Food and Drugs Act, but under the Margarine Act. He said so because in Glasgow customers objected to use the word "margarine," and although they knew they were getting margarine asked for butter, or merely for "fivepenny" or "sixpenny," according to the price of the article. The result was that a grocer in Glasgow was liable to conviction under the Food and Drugs Act every day he opened his shop. Where there was deliberate intention to commit fraud, he did not think too severe a penalty could be inflicted. He did not think there were more than a very few dishonest traders in Glasgow or any part of Scotland, but these few gave a bad character to the trade. He would not allow margarine to be packed in kits or butts or casks identified with special kinds of pure butter, but would have a package for margarine. He objected to any interference with the practice of colouring margarine because it would drive the article out of the market.

Mr. Arthur J. Giles, secretary of the Grocers' Federation and the Metropolitan Butter Association, was also examined. He recommended the appointment of a board of reference, who would deal with such matters as the standard of purity, the colouring of margarine, and the question of what was injurious, and he suggested that on that board there should be representatives of such bodies as the Society of Public Analysts, the General Medical Council, the Grocers' Federation, the wholesale dealers and manufacturers, and Somerset House. He thought an appeal to Somerset House should be given in every case from the decision of the local analyst.

The committee then adjourned.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.

ALLAN, H., M.B., M.S. Aberd., has been appointed Medical Officer of Health to the Whaley Bridge Urban District Council.

BAILEY, T. R., M.D., C.M. Edin., has been reappointed Medical Officer of Health for the Bilston District Union.

BROSTER, A. E., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer of Health to the Wirkworth District Council.

BROWN, OSMOND P., M.R.C.S., has been appointed Medical Officer of Health to Knighton Rural District Council.

BUCHANAN, PETER, M.B., C.M. Glasg., has been appointed Medical Officer of Health to the Coleford Urban District Council.

BUTLER, P., L.R.Q.C.P., L.R.C.S. Irel., has been appointed Medical Officer for the Chiddingfold Sanitary District of the Hambledon Union.

CRAWFORD, DOUGLAS, M.B., C.M. Edin., has been appointed Assistant Honorary Surgeon to the Stanley Hospital, Liverpool, vice Smith, resigned.

DAVIDSON, J., M.B. Lond., M.R.C.S., has been appointed Medical Officer to the Uxbridge Joint Hospital.

ELLIOTT, R. H., M.B., B.Ch. Irel., has been appointed Junior House Surgeon to the Stanley Hospital, Liverpool.

FINDLAY, G., M.B., C.M. Aberd., has been appointed Medical Officer of Health to the Campden District Council.

GARDNER, HAROLD BELLAMY, M.R.C.S. Eng., L.R.C.P. Lond., has been appointed Assistant Anæsthetist to Charing-cross Hospital.

GILLAM, T. H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Saply Pitchard Sanitary District of the Martley Union.

HANNAH, NATHAN, L.R.C.P. Edin., L.F.P.S. Glasg., has been appointed Medical Officer of Health to the Abram Urban District Council.

HARRIS, WILFRED J., B.A., M.B., B.C. Cantab., has been appointed Junior House Physician to the National Hospital for the Paralysed and Epileptic, Queen-square, vice Warrington, resigned.

LITTLETON, PHILIP R., M.R.C.S., has been appointed Medical Officer of Health to the Ashbourne Urban District Council.

LOCKWOOD, B. S., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Assistant Medical Officer to the Workhouse of the Leeds Union, vice Hirst, resigned.

MARTIN, ARTHUR J., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Medical Officer for the Bloxwich Sanitary District of the Walsall Union, vice Somerville.

MARTIN, J. T., L.R.C.P., L.R.C.S. Irel., has been appointed Medical Officer to the Catholic training-ship *Clarence*, Birkenhead.

MOXON, WM., L.R.C.P., L.M. Edin., M.R.C.S., has been appointed Medical Officer of Health to the Matlock Urban District Council.

PERCIVAL, THOS., M.R.C.S., has been appointed Medical Officer of Health to the Knottingley Urban Council.

RISELEY, STANLEY, M.D. Edin., has been appointed House Surgeon to the Rotherham Hospital and Dispensary.

ROBERTS, EDWARD B., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., L.M., has been appointed Medical Officer of Health to the Hawarden District Council.

ROBERTSON, JOHN, M.D. Edin., B.Sc. (Public Health), has been re-appointed Medical Officer of Health for St. Helen's, Lancs.

ROSE, F., L.D., F.R.C.S., has been appointed Honorary Dentist to the Stanley Hospital, Liverpool, vice Alexander, resigned.

RUDD, CHAS. F., M.R.C.S., has been appointed Medical Officer for the Stalham Sanitary District of the Smallburgh Union.

SKINNER, D. S., M.D. Brux., L.R.C.P. Lond., M.R.C.S., L.M., has been appointed Medical Officer of Health to the Willesden District Council.

STEELE, JONATHAN, L.R.C.P. & S. Ed., has been reappointed Medical Officer to the Kidsgrove Urban Council.

STODDART, W. H. B., M.B., B.S. Lond., has been appointed Senior House Physician to the National Hospital for the Paralysed and Epileptic, Queen-square, vice Whiting.

SUNDERLAND, OLIVER, L.R.C.P., L.M. Edin., M.R.C.S., has been appointed Medical Officer of Health to the Bexley Urban District Council.

TAYLOR, JOHN W., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health to the Methley Urban District Council.

WALKER, B., M.B. Durh., M.R.C.S., has been appointed Medical Officer for the Ravenstonedale Sanitary District.

WEBB, A. LISLE, M.R.C.S., M.R.C.P., has been appointed Resident Medical Officer to the National Hospital for Diseases of the Heart and Paralysis, Soho-square, vice Goldney.

WILCOX, E., M.D., M.S. Edin., M.R.C.S., has been appointed Medical Officer for the Ashburton Sanitary District of the Newton Abbott Union, vice Brown, resigned.

WILLIAMS, EDWARD, M.R.C.S., has been appointed Medical Officer of Health for the Aberayron Urban Sanitary District.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BOROUGH OF LOWESTOFT.—Medical Officer of Health and Medical Attendant at the Sanatorium for the Urban and Port Sanitary Districts of Lowestoft. Salary for the Urban Sanitary District, £100 per annum; for the Port Sanitary District, £20 per annum; and as Medical Attendant at the Sanatorium, £30 per annum. Applications to the Town Clerk, Lowestoft.

BRADFORD INFIRMARY AND DISPENSARY.—Honorary Physician.

CITY OF LONDON UNION INFIRMARY, Bow-road, E.—Resident Officer. Salary £450 per annum and unfurnished residence. Applications to the Clerk, Guardians' Offices, 61, Bartholomew's-close, E.C.

DISTRICT INFIRMARY, Ashton-unde-Lyne.—House Surgeon. Salary £90 a year and board and lodging.

FLINTSHIRE DISPENSARY.—Resident House Surgeon. Salary £120 a year, with furnished house; rent and taxes free; also coal, light, water, and cleaning; or in lieu thereof the sum of £20 per annum. Applications to the Secretary, Board-room, Bagillt-street, Holywell, N. Wales.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—Senior House Surgeon, for six months. Salary at the rate of £60 per annum, with board, lodging, and laundry in the hospital.

KENT COUNTY LUNATIC ASYLUM, Barming Heath, near Maidstone.—Fourth Assistant Medical Officer and Pathologist, for two years, unmarried. Salary £175 per annum (rising £5 a year), with furnished quarters, attendance, coal, gas, garden produce, and washing.

LONDON HOSPITAL, Mile End, E.—Medical Electrician.

LONDON HOSPITAL MEDICAL COLLEGE, Mile End, E.—Senior Demonstrator of Anatomy. Salary by a percentage on fees.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer for one year, unmarried. Salary £150 per annum, with board and residence.

NEW HOSPITAL FOR WOMEN, 144, Euston-road, N.W.—Medical Women, qualified as Clinical Assistants, for the Out-patient Department.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, Shoreditch, N.E.—Junior House Physician for six months. Board and lodging (including washing) will be provided.

NORTH STAFFORDSHIRE INFIRMARY AND EYE HOSPITAL, Hartshill, Stoke on-Trent.—Assistant House Surgeon for six months.

POPLAR AND STEPNEY SICK ASYLUM DISTRICT.—Medical Superintendent for the Asylum at Bromley, Middlesex, E.—Salary £350 per per annum, with rations, furnished apartments, washing, and service.

ROYAL GENERAL DISPENSARY, 25, Bartholomew's-close, London, E.C.—Physician.

ROYAL HOSPITAL FOR CHILDREN AND WOMEN, Waterloo Bridge-road, S.E.—Clinical Assistant and Anæsthetist for six months. Salary at the rate of £30 per annum.

SHEFFIELD GENERAL INFIRMARY.—House Surgeon. Salary £120 a year, with board, lodgings, and washing, with a prospective advance of £10 per year for the second and third years. Also, Assistant House Surgeon for three years. Salary £80 per annum, with board, lodging, and washing.

SIR PATRICK DUN'S HOSPITAL, Dublin.—Assistant Surgeon for the Out-patient Department. No salary.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck-street, Cavendish-square.—Honorary Dental Surgeon.

UNIVERSITY OF ABERDEEN.—Examiners in Medicine.

VICTORIA HOSPITAL FOR CHILDREN, Queen's-road, Chelsea, S.W.—House Physician to the in-patients of this hospital. Honorarium of £50 per annum, and will be provided with board and lodging in the Hospital.

WANDSWORTH AND CLAPHAM UNION.—District Medical Officer for the No. 2 District of the Parish of Streatham. Salary £60 per annum, with fees for surgical operations and Midwifery. Such salary to include the cost of the provision of medicine, &c.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Resident Assistant, for six months. Board, lodging, and washing provided.

WREXHAM INFIRMARY AND DISPENSARY.—House Surgeon. Salary £80 per annum, with furnished rooms, board, gas, coal, and attendance.

Births, Marriages, and Deaths.

BIRTHS.

BURNETT.—On June 4th, at St. Albans-road, Watford, the wife of John Duncan Burnett, M.B., of a daughter.

CAIRD.—On June 5th, at 21, Rutland-street, Edinburgh, the wife of F. M. Caird, M.B., F.R.C.S. Edin., of a son.

ELAM.—On June 8th, at Addington House, New Barnet, the wife of W. H. Elam, F.R.C.S. Eng., of a son.

WILLIAMS.—On June 5th, at Holyrood House, Beckenham, Kent, the wife of J. Lawson Williams, M.D., of a son.

MARRIAGES.

BURTON—PERKS.—On June 6th, at St. Paul's, Burton-on-Trent, by the Rev. N. Jackson, M.A., vicar of Easingwold, assisted by the Rev. F. H. Beaven, vicar of the parish, James Edward Burton, B.A. Cantab., B.Sc. Lond., head master of Easingwold Grammar School, fourth son of Frederic Burton, of Knatchbull-road, S.E., to Constance May, younger daughter of Charles Perks, M.R.C.S., L.R.C.P., of Burton-on-Trent.

ECCLES—ANSTIE.—On June 12th, at the Baptist Chapel, Devizes, by the Rev. J. F. T. Hollowes, M.A., of Birmingham, William McAdam Eccles, M.S. Lond., F.R.C.S. Eng., of Harley-street, W., son of W. Soltau Eccles, Esq., of Upper Norwood, to Anna Coralie, second daughter of Edward B. Anstie, Esq., of Devizes.

EDGELOW—MATTHEW.—On June 12th, at St. George's, Hanover-square, William Ford Edgelow, M.D., of Braddonfield, Torquay, to Emily Jane, widow of the late Alexander Matthew, of Braddon Villa, Torquay.

LANGDON-DOWN—CLEVELAND.—On June 6th, at St. Thomas's Church, Portman-square, Reginald L. Langdon-Down, M.B., M.R.C.P., elder son of J. L. H. Langdon-Down, M.D., F.R.C.P., J.P., of Harley-street, to Jane Jarvie, eldest daughter of the late Lieut.-Colonel G. D. D. Cleveland, 98th Regiment.

LAWS—LUMBY.—On June 11th, at the Parish Church, Grantchester, Cuthbert Umfreville Laws, M.B., Dunelm, son of Wm. Geo. Laws, City Engineer, Newcastle-upon-Tyne, to Grace Margaret Bryham Lumby, daughter of Dr. Lumby, of Cambridge.

DEATHS.

ARMSTRONG.—On June 5th, Fergus Armstrong, M.D., of Appleby, Westmoreland.

CARRINGTON.—On June 10th, at the residence of her son, Dr. W. H. Carrington, 143, Lavender-sweep, London, Louisa Maria, widow of the late Mr. F. G. Carrington, of Gloucester, and mother of the late Dr. R. E. Carrington, of Guy's Hospital, aged 80.

CLARK.—On June 6th, at Brompton, William Clark, M.R.C.S., L.R.C.P., aged 38.

DEANE.—On May 7th, at Naini Tal, N.W.P. India, Surgeon-Major William Deane, F.R.C.S., aged 39.

HADDEN.—On June 6th, at St. Thomas's Hospital, London, John Hadden, M.D., of White Hall, Hampton Court, aged 53, for twenty-five years practising at Horncastle, Lincolnshire, and lately at Wilton Lodge, Norbiton, Kingston-on-Thames.

PARKER.—On May 29th, at Parrock-street, Gravesend, Alfred Edward Parker, M.R.C.S., aged 44.

PERKINS-CASE.—On June 11th, at Wilton Lodge, Croydon, P. W. Perkins-Case, M.D., aged 41.

SILVESTER.—On June 4th, at Wellesley-road, Croydon, Simeon Talbot Silvester, L.D.S., R.C.S. Eng., aged 49.

TRIMMER.—On June 2nd, at Leytonstone, Essex, Henry Beesley Trimmer, M.D., late of Gamlingay, Cambridgeshire, aged 65.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 13th, 1895.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
June 7	30·21	N.E.	62	56	123	79	52	...	Bright
,, 8	30.16	N.E.	65	59	124	84	53	...	Bright
,, 9	30·07	W.	72	61	122	84	58	...	Overcast
,, 10	29·88	N.E.	63	59	103	71	61	...	Cloudy
,, 11	29·98	N.	61	53	119	73	53	...	Cloudy
,, 12	30·02	N.W.	57	50	112	65	50	0·03	Cloudy
,, 13	30·18	N.W.	57	50	114	64	47	...	Cloudy

Notes, Short Comments & Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET should be addressed "To the Manager."

We cannot undertake to return MSS. not used.

MANAGER'S NOTICE.

A LITHOGRAPHED CIRCULAR LETTER, emanating from an office in the Strand district, is being sent to members of the medical profession, offering to supply them with THE LANCET, in conjunction with an accident insurance policy. The Proprietors of THE LANCET are in no way connected with the scheme (of which they cannot approve), and were not aware of its inception until their attention was called to it by a reader who had received the circular in question.

STAMMERING.

To the Editors of THE LANCET.

SIRS,—In the interesting lecture on Impediments of Speech by Dr. W. S. Colman, reported in THE LANCET of the 8th inst., he says the stammerer "must try to vocalise ..... if he stumbles over such a word as POT he should think not merely of the voiceless letter P, but of vocalising the vowel O. ..... This method we owe to Dr. Wyllie." Allow me to say that the late Emil Behnke originated this method as far back as May, 1882, more than nine years before the first appearance in the *Edinburgh Medical Journal* of Dr. Wyllie's articles on "Disorders of Speech," the publication of which commenced in October, 1891. In April, 1891, Mr. Behnke was honoured by an invitation to read a paper before the South Wales Branch of the British Medical Association on "Stammering and other Speech Defects," and to describe the methods by which he had obtained such excellent results; and he afterwards lectured on the same subject to other assemblies of medical practitioners. In his lecture occur the following sentences: "Let the stammerer *exaggerate his vowels* at the expense of his consonants. ..... The stammerer should therefore dwell on an easy syllable, *prolonging the vowel of it.*" At the request of many medical men the lecture was published under the title, "Stammering: its Nature and Treatment." That Dr. Wyllie has also suggested the same plan as did Mr. Behnke before him, and the coincidence that the majority of Dr. Colman's opinions are identical with those of Mr. Behnke, prove how correct were his theories.

I am, Sirs, yours obediently,

Earl's Court-square, S.W., June 10th, 1895. K. BEHNKE.

THE CASE OF MR. C. B. TOWNSHEND.

THE following additional subscriptions have been received or promised, and are hereby gratefully acknowledged:—

Dr. John P. Henry ...	£0 10 0	Mr. Edwd. Gregory...	£1 1 0
Dr. T. Willoughby Cole ...	0 10 0	Dr. R. E. Foott	0 10 6
Mr. W. Clark	1 0 0	Dr. Garrod Thomas ...	3 0 0
Mr. E. C. Greenwood ...	5 5 0	Dr. H. Buss...	0 10 0
Mr. Strangman Grubb ...	1 1 0	Dr. Chas. Gage Brown ...	1 1 0

Further subscriptions will be received and acknowledged by the Rev. H. Townshend, 41, King Henry's-road, South Hampstead, N.W.

UNDER the title "Æsculapian Love" the *St. James's Gazette* publishes the following humorous lines in satire of the valetudinarian tendencies of the younger generation:—

"O bid me not, Amanda, as a student of THE LANCET,
To meet you when the moon has tinged the sleeping earth with [gold;
The evening is traditionally fitting, but perchance it
Would bring about bronchitis, or at least a heavy cold.

"And, though we love each other as but few have loved before us,
We need no outward token of unalterable bliss;
Leave that to those less prudent; the authorities assure us
That very often microbes are transmitted by a kiss.

"Nor must you rush towards me to express your satisfaction;
It's true that fate has severed us for many a weary day;
But still, excitement, as you know, accelerates the action
Of pulse and heart in really quite a prejudicial way.

"I'll see you, then, at midday (please make sure the room is heated
To 60° or to 61°); we'll talk about the past,
And how our various ailments by our doctors have been treated—
When, by the way, Amanda, were you vaccinated last?

"And so we'll meet to-morrow; I will sing your favourite ballad
(For vocal exercises greatly benefit the lung),
And, having lunched discreetly off an hygienic salad,
We'll gaze into each other's eyes, and on each other's Tongue!"

An Interested Member &c.—A Licentiate of a Royal College of Physicians has certainly the right to describe himself as a physician. That is exactly what he is. He has not the right to prefix "Dr." to his name, because he is not a Doctor of Medicine.

J. W. W.—Our advertisement columns contain the names and business addresses of several manufacturers of such articles. Our correspondent should write to the different firms for catalogues or price lists.

A QUESTION OF UNPROFESSIONAL ACTION.

To the Editors of THE LANCET.

SIRS,—A, B, and C are neighbouring practitioners. A has held the appointment of medical officer to the workmen of a ship-repairing works for five years. A had a month's notice from the workmen. A deputation of the workmen waited on B and C asking them to become candidates for the appointment. On hearing of this A wrote B and C asking if they were candidates. B replied saying, as he said to the deputation, that he could not become a candidate unless there was a vacancy. C gave a similar answer to A. At the expiration of the month the secretary of the workmen wrote to B and C stating that the appointment was vacant. B and C applied as well as A. A accuses B and C of acting unprofessionally, which B and C repudiate. And assuming that A did canvass the votes of the workmen, did A act professionally?

I am, Sirs, yours faithfully,
June 12th, 1891. X. Y. Z.

*** A, having received a month's notice, was right in considering that the post was not vacant until the month had expired. We do not see that there was any concealment on his part of the fact that the post would be vacant at the end of the month, and such concealment was obviated by the action of the workmen. If it is suggested by our correspondent's letter that B and C were prevented from canvassing the constituency by representations made to them by A, who himself did canvass the constituency, A's good taste might be questioned. But if A merely signified during his month under notice his willingness to continue to hold the appointment, possibly under altered conditions, his conduct cannot be impugned. When the secretary at the expiration of the month formally told B and C that the appointment was vacant, they were clearly, on the facts before us, at liberty to apply for it. Our correspondent will recognise that our answer is strictly based upon his representation of the case.—ED. L.

THE INFLUENCE OF THE ADMINISTRATION OF CHLOROFORM UPON THE COURSE OF PHTHISIS PULMONALIS.

To the Editors of THE LANCET.

SIRS,—Having had under observation a case of phthisis pulmonalis in which a surgical operation was performed, chloroform being administered, I am anxious to know if in such cases your readers have noticed any improvement in the lung condition or diminution in the number of tubercle bacilli in the sputum subsequently to the use of the anæsthetic.

I am, Sirs, yours truly,
St. Leonards, June 5th, 1895. EDWARD SAMUEL LEE, M.D.

"ANTITOXINE."

THE British Antitoxine Manufacturing Company have appealed to us to support their use of a term for the product they supply—the properties of which are said to be those of a powerful antipyretic and analgesic—on the ground that the reason for our previous protest no longer obtains. We doubt, however, whether it is the fact that "diphtheria antitoxin" has had its day. On the contrary, we believe that it is still on its trial, and have always held that such a trial must necessarily be a prolonged and patient one before it can be proved to be ineffective. We must therefore still regret this confusion of nomenclature, although we are glad to be informed that the drug "antitoxine" is obtaining an assured reputation. As that is the case it shows that there is not much risk in practice of confounding two remedies so similar in name but so unlike in action.

Newport.—The results to be obtained by the adoption of the Infectious Disease (Notification) Act largely depend upon the means available in the district for utilising the information when acquired; and amongst these means the provision of some hospital accommodation for first attacks of infectious diseases, and means of disinfection, occupy a foremost place. But, even apart from these, very useful work can be done by way of advice, disinfection, the control of school attendance in the case of children living in infected houses, and the like. And there is the further advantage that the mere knowledge of the existence of infectious disease in itself serves as a stimulus to sanitary authorities so to organise their districts that they may prevent the spread of infection. For these various reasons we advocate the adoption of the provisions of the Act in question.

Veritas.—The matter is not under discussion in our columns at the present time, so that our correspondent's communication somewhat beats the air.

Interested.—It is absolutely impossible. The story is a common hoax.

"ALLEGED TOUTING BY A PUBLIC VACCINATOR."

To the Editors of THE LANCET.

SIRS,—In your issue of May 18th you answered a letter of mine with regard to certain alleged irregularities on the part of a public vaccinator. Acting on your advice, I wrote to the Local Government Board, and have received the enclosed reply. Having drawn the attention of this public vaccinator and his principal to your answer, they repudiate any charge of unprofessional conduct, and state that "the conduct denounced by yourself and the Editors of THE LANCET is equally abhorrent" to themselves. Further, this public vaccinator admits that it is his custom to call on patients and ask "if they wish to have their children vaccinated publicly or privately," and that "the orders under which I act are to visit all cases that are on my list as needing vaccination, and residing without two miles of my residence." While I must believe that technically this public vaccinator is correct and is acting more or less according to "orders" received from the local body who elected him; and since both he and his principal express their abhorrence at anything which you would call unprofessional, I shall be obliged if, having considered this matter from this public vaccinator's own statements as herein given, you will kindly express your opinion once more.

I am, Sirs, yours faithfully,
June 12th, 1895. C. H. E.

[*Enclosure.*]

Local Government Board, Whitehall, S.W.
11th June, 1895.

SIR,—I am directed by the Local Government Board to advert to your letter of the 27th ultimo, and, in reply, I am to state that the Board have no power to prevent Dr. ——— from adopting the practice referred to therein.—I am, Sir, your obedient servant,

C. H. E——, Esq. ALFRED D. ADRIAN, Assistant Secretary.

*** We found it our duty upon our correspondent's previous communication to state our opinion that the conduct of the public vaccinator was indefensible, and if persisted in should be reported to the Local Government Board. The Board, it would seem, have no power to interfere, but, noting the public vaccinator's abhorrence of anything that has the appearance of touting, we venture to hope that the limitations of the Government office will not affect his conduct, and that he will abstain from an interference with the patients of a fellow-practitioner, which we consider most unfortunate, and, as we have already said, quite unprecedented.—ED. L.

"THE SWEATING OF MEDICAL MEN."

To the Editors of THE LANCET.

SIRS,—I have noticed some recent correspondence on the "sweating" of medical men by medical aid societies. Can we be surprised at the laity holding our services so lightly when we ourselves treat them as though they were not worth much, as evidenced by advertisements for locum tenents where "a comfortable home and railway fare" are offered in return for the charge of a practice? Two or three such advertisements are to be seen in the current number of THE LANCET.

I am, Sirs, yours obediently,
June 3rd, 1895. X.

"UTERINE STEMS."

To the Editors of THE LANCET.

SIRS,—I waited for the next issue of THE LANCET before replying to your strictures upon my letter in the issue of June 1st, in case any other medical man might also criticise my letter, but since no one has done so I now reply to you. First, you accuse gynæcologists of the present day of the performance of operations upon anteflexed uteri on "the false pathology which attributed an altogether exaggerated, not to say imaginary, importance to the necessity of keeping the axis of the uterus straight." I am bold enough to think that gynæcologists know sufficient of the pathology of anteflexed uteri to justify their actions, and perhaps I may be pardoned by you for thinking that intra-uterine stems are used for other purposes than keeping the axis of the uterus straight. Then next you remark, "It is difficult to understand how anyone can suppose that applications to the endometrium through a hole in the centre of a stem pessary can have any good effect on salpingitis." Surely no one will dispute that the nearer one approaches the seat of disease the greater will be the chance of cure. Then comes the sentence which affects me more closely, "on the other hand, there is no doubt whatever that endometritis, metritis, perimetritis, salpingitis, ovaritis, and death have been caused by the use of intra-uterine stems." True, death does sometimes follow even the simplest operation, but since I have used uterine stems in no less than 200 cases without even the shadow of death following, it will take something more than the voice of THE LANCET before I shall feel justified in debarring patients from the many benefits accruing from the use of the stems. Then, Sirs, with regard to your translation of "&c.," I do not know if it is intended for a joke, but if so I certainly think you who print "death" in italics would do well to refrain from associating a joke with death. No one values criticism more than I, and I sincerely thank all who trouble to point out my errors.

I am, Sirs, yours faithfully,

Peckham, June 11th, 1895. ROBERT HUGH HODGSON.

Mr. H. George.—The average experience of the profession in regard to a preparation cannot well be gauged. Many may not use it; many may use it only so little that their report would not be weighty; and many may use it much and yet never report upon it. We have spoken well of the preparation. Of the book alluded to by our correspondent we know nothing.

R. C.—1. "A Guide to the Examination of the Urine," by J. Wickham Legg, F.R.C.P. Lond., &c.; Seventh Edition, edited and revised by H. Lewis Jones, M.A., M.D. London: H. K. Lewis, 1893.—2. Any philosophical instrument maker.

Mr. W. Henry Kesteven is thanked for his interesting communication. If we are able to accede to his request we will communicate with him.

"HOMES FOR THE DYING."

To the Editors of THE LANCET.

SIRS,—"H. A. B." will find such an institution as he requires in the Hostel of God, 82, The Chase, Clapham, S.W.—a "free home for the dying," served by the St. James's Servants of the Poor. Persons of both sexes and of every class are taken in, and, though in charge of a Church of England Sisterhood, no distinction is made as to creed. Your correspondent should write to the mother superior to inquire if there is a vacant bed for his old servant. There is not much room in the present temporary premises; but the sisters are now appealing for funds in order to build a permanent hospital.

I am, Sirs, yours faithfully,

Kensington Court, W., June 8th, 1895. ATHELSTAN RILEY.

SWEATING EXTRAORDINARY.

To the Editors of THE LANCET.

SIRS,—The underpaying of assistants in the profession is not unknown. The following, however, fairly earns the palm. A certain apothecary and surgeon keeps a qualified man to manage a branch practice, six miles away from headquarters, for the magnificent pittance of £30 per annum and board. Surely, a mere unqualified assistant gets more. The above manager does all the work, and there are no extras whatsoever.

I am, Sirs, yours faithfully,

June 10th, 1895. DISGUSTED.

UNFERMENTED WINE.

To the Editors of THE LANCET.

SIRS,—I heard the statement made recently at a church meeting that the unfermented wine used at the sacraments was not the juice of the grape, but merely some kind of fruit juice extracted from, e.g., raspberries. Could any of your readers kindly inform me if this is really so; and, if not, give me the name and address of some firms who make *bond-fide* grape wine (unfermented, of course)?

I am, Sirs, yours truly,

June 11th, 1895. VINUM.

THE OXYBROMIDES OF MERCURY.

To the Editors of THE LANCET.

SIRS,—Can any of your readers kindly inform me where I can obtain solutions of the oxybromides of mercury, arsenic, &c., as used in the United States with marked success?—I am, Sirs, yours faithfully,

June 12th, 1895. S. H.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynecological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Gt. Northern Central (2.30 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North West London (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

WEDNESDAY.—ROYAL METEOROLOGICAL SOCIETY (22, Gt. George-st., Westminster).—7.30 P.M. Mr. Richard H. Curtis: Hourly Variation of Sunshine at Seven Stations in the British Isles.—Mr. Henry Harries: The Frequency, Size, and Distribution of Hail at Sea.

ROYAL MICROSCOPICAL SOCIETY (20, Hanover-sq., W.).—8 P.M. Mr. W. C. Bosanquet: On the Anatomy of Nyctotherus Ovalis.—Dr. A. Bruce: A New Microtome.

NORTH-WEST LONDON CLINICAL SOCIETY.—8.30 P.M. Clinical Meeting.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY.—LONDON POST-GRADUATE COURSE.—Royal London Ophthalmic Hospital, Moorfields, 1 P.M., Mr. R. M. Gunn: Cataract.—London Throat Hospital, Gt. Portland-st., W., 8 P.M., Mr. G. C. Wilkin: Nasal Polypi.

TUESDAY.—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 2 P.M., Dr. Percy Smith: Insanity with Syphilis; Insanity with Organic Brain Disease.

WEDNESDAY.—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Lecture by Dr. Gowers.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-sq., W.C.).—5 to 6 P.M. Dr. Morgan Dockrell: Sarcoma.

LONDON POST-GRADUATE COURSE.—Royal London Ophthalmic Hospital, Moorfields, 8 P.M., Mr. A. Q. Silcock: Secondary Glaucoma, with Illustrated Cases.—Hospital for Skin Diseases, Blackfriars, 1 P.M., Dr. Payne: Syphilitic Affections of the Skin.

THURSDAY.—LONDON POST-GRADUATE COURSE.—Hospital for Sick Children, Gt. Ormond-st., 3.30 P.M., Dr. D. B. Lees: Cases from the Medical Wards.—National Hospital for the Paralysed, Bloomsbury, 2 P.M., Dr. Tooth: Diseases of Cranial Nerves.—Central London Sick Asylum, Cleveland-st., W., 5 30 P.M., Dr. Frederick Taylor: Cases in the Wards.

FRIDAY.—LONDON POST-GRADUATE COURSE.—Bacteriological Laboratory, King's College, 3 to 5 P.M., Prof. Crookshank: Erysipelas and Suppuration.

SATURDAY.—LONDON POST-GRADUATE COURSE.—Bethlem Hospital, 11 A.M., Dr. Hyslop: Insanity with Cardiac Disease, Gout, &c.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-sq., W.C.).—5 P.M. Dr. Morgan Dockrell: Eczema (treatment).

During the week marked copies of the following newspapers have been received:—*Glasgow Herald, Sussex Daily News, Brisbane Telegraph, Western Daily Mercury, Cape Times, Bombay Gazette, Falkirk Herald, Pioneer Mail, Hong Kong Telegraph, Times of India, Express and Star (Wolverhampton), Newcastle Chronicle, Weekly Times and Echo, Ayrshire Post, Hull News, Rochdale Observer, Hampshire Independent, Birmingham Mail,* **Cork Constitution,** *Scotsman, Builder, Brighton Gazette, Bristol Mercury, Architect, City Press, Liverpool Daily Post, Hull Daily Mail, Leeds Mercury, Temperance Chronicle, Yorkshire Post, Liverpool Mercury, Pulman's Weekly News, Bury Guardian, Dumfries Standard, Montreal Daily Herald, West Middlesex Standard, Mining Journal, Reading Mercury, Weekly Free Press and Aberdeen Herald, Sanitary Record, Local Government Chronicle, Dewsbury Reporter, Surrey Advertiser, Dover Express, Crewe Guardian, Darlington Echo, Public Health, Guy's Hospital Gazette, Isle of Wight Express, Morning Leader, Oswestry Advertiser, Dundee Courrier, Local Government Journal, Courrier de la Presse, Kent Weekly News, Citizen, Argus (Melbourne), Portsmouth Times, County Council Times, Birmingham Daily Post, Southampton Observer, Whitehall Review, Westmorland Gazette, Hertfordshire Mercury, &c., &c.*

Communications, Letters &c. have been received from—

A.—Dr. Albesco, Bucharest; Surg.-Capt. S. G. Allen, Woolwich; Aberdeen University, Secretary of; Ashton-under-Lyne District Infirmary, Secretary of; Achilles, Lond.

B.—Dr. Fletcher Beach, Lond.; Dr. D. C. Black, Glasgow; Dr. J. Braithwaite, Leeds; Dr. W. J. Bell, Appleby; Dr. E. Bielley, Bruges; Dr. A. O. Bobardt, H.M.S. *Tyne*, near Albany; Mr. A. Wynter Blyth, Lond.; Mr. Lennox Browne, Lond.; Mr. F. H. Bate, South Wimbledon; Mr. L. M. Bowen-Jones, Carmarthen; Mr. T. B. Browne, Lond.; Messrs. W. V. Bowater and Sons, Lond.; Messrs. Burroughs, Wellcome, and Co., Lond.; Messrs. Blondeau et Cie., Lond.; British Medical Association, Hon. Secretary of; Bury Dispensary Hospital, Secretary of; Bradford Infirmary, Secretary of; British Castor Co., Lond.; Bryant Press, Toronto; Benedict, Lond.

C.—Dr. J. A. Campbell, Carlisle; Dr. J. G. Connal, Glasgow; Dr. L. J. G. Carré, Lond.; Mr. A. H. Cheatle, Lond.; Mr. R. A. Caldwell, Southampton; Mr. W. R. Culling, Lond.; Mr. H. N. Custance, Lond.; Messrs. E. Cook and Co., Lond.; Cortland Wagon Co., Lond.; Central School of Chemistry, Lond.; Catholic, Lond.; Charing-cross Hospital, Secretary of.

D.—Dr. P. W. Diack, Bury; Dr. T. Dutton, Lond.; Mr. W. Drewitt, Kingston-on-Thames; Mr. W. Defries, Lond.; Mr. J. Downes, Lond.; Mr. W. G. Dickinson, Lond.; Messrs. Domeier and Co., Lond.; Messrs. Dawson and Sons, Lond.; Messrs. Driscoll, Lennox, and Co., Lond.; Sir P. Dun's Hospital, Dublin, Secretary of; Dorchester Asylum, Medical Superintendent of.

E.—Dr. G. Fitzgerald, Lond.; Dr. G. C. H. Fulton, Eston; Mr. W. Fleming, Lond.; Forceps, Lond.

G.—Dr. R. Grieve, Lasswade; Mr. H. L. Gordon, Middelburg, Cape Colony; Mr. J. Griffiths, Lond.; Messrs. Gautier Fils and Neveux, Paris; Great Eastern Railway Co., Continental Traffic Manager of; Gold Medallist, Lond.; G. I., Lond.

H.—Dr. G. Holmes, Lond.; Dr. V. D. Harris, Lond.; Mr. J. S. Hurst, Londonderry; Mr. R. N. Hartley, Leeds; Mr. J. Heywood, Manchester; Mr. J. Hill, Gressenhall; H., Halifax.

J.—Mr. J. Jarratt, St. Leonard's-on-Sea; Mr. H. K. Johnstone, Margate.

K.—Dr. W. H. Kesteven, Lond.; Dr. Norman Kerr, Lond.; Dr. T. H. Kellock, Lond.; Kinnaird, Lord, Lond.; Rev. J. H. W. Kane, Lond.; Mr. R. G. B. Kelne, Lond.; Mr. R. T. Kent, Glasgow; Messrs. Keith and Co., Edinburgh; K. C. B., Lond.

L.—Dr. A. E. Lloyd, Rhyl; Dr. G. H. Lang, Clifton; Messrs. Leader and Sons, Sheffield.

M.—Dr. T. Modlinski, Moscow; Mr. N. Mayne, Longford; Canon F. H. Murray, Chislehurst; Messrs. Macmillan and Co., Lond.; Messrs. Milton and Co., Lond.; Medico; Massage.

N.—Mr. L. Newland-Pedley, Lond.; National Orthopædic Hospital, Secretary of; North Staffordshire Infirmary, Secretary of; Nemo.

O.—Dr. W. O'Neill, Lincoln; Oculist, Lond.

P.—Mr. J. B. Pike, Loughborough; Mr. J. V. Pestana, Penang; Mr. Y. J. Pentland, Edinburgh; *Phonographic Record*, Editor of; Physiology, a Student of.

Q.—Quest, Lond.

R.—Dr. A. Robertson, Rotherham; Dr. R. M. Ronaldson, Edinburgh; Mr. R. Redpath, Newcastle-on-Tyne; Messrs. Ridges and Sons, Wolverhampton.

S.—Dr. A. Stewart, Manchester; Dr. J. A. Shaw-Mackenzie, Lond.; Mr. W. W. Smyth, Eastbourne; Mr. T. Smith, Lond.; Mr. F. W. Sears, Lond.; Messrs. G. Street and Co., Lond.; Sanitary Wood Wool Co., Lond.; Sanitas Co., Lond.; *Sanitary Record*, Lond., Editor of.

T.—Dr. C. B. Taylor, Nottingham; Dr. J. A. Thompson, Sydney, N.S.W.; Mr. T. F. Tracey, Glasgow; Mr. D. Thomas, Garnant.

U.—United Horse Shoe and Nail Co., Lond., Secretary of.

V.—Victoria Hospital for Children, Lond., Secretary of; Volunteer Medical Staff Corps, Lond.; Veritas.

W.—Dr. R. J. Wylie, St. Ives, Cornwall; Dr. Forbes Winslow, Lond.; Dr. A. Wright, Lond.; Mr. W. Spencer Watson, Lond.; Miss Walker, Lond.; Messrs. Waddell, Kinnear, and Co., Sheffield; Wolverhampton General Hospital, Secretary of; Westminster General Dispensary, Lond., Secretary of.

Letters, each with enclosure, are also acknowledged from—

A.—Dr. E. Allen, Hawes; Dr. E. Antrobus, Great Malvern; Dr. G. A. Abrath, Sunderland; Mr. T. W. J. Allen, Grimsby; A. B., Lond.; A. B. C., Lond.

B.—Dr. H. C. Bastian, Lond.; Dr. G. F. Blandford, Lond.; Dr. G. S. Buchanan, Lond.; Mr. J. S. Buck, Eaton Socon; Mr. H. Brice, Pontypridd; Mr. W. E. Barton, Staunton-on-Wye; Mr. W. Bernard, Londonderry; Mr. C. Birchall, Liverpool; Mr. Betts, Walthamstow; Mrs. L. Bennett, Lond.; Mrs. Beaven-Rake, Broadstairs; Messrs. Burgoyne, Burbidges, and Co., Lond.; British Viavi Co., Lond.; Burt, Lond.; Banks, Lond.; B.A., London.

C.—Dr. Harry Campbell, Lond.; Dr. A. H. Clemow, Lond.; Dr. Collier, Bulwell; Dr. Cooper, Hyde; Dr. D. E. Cantillon, co. Cork; Mr. W. Curnock, Farnborough, Hants; Mr. T. Champness, Rochdale; Messrs. Callard and Co., Lond.; Central London Throat and Ear Hospital, Secretary of; Cosmos, Lond.; Calcia, Lond.; Crimea, Lond.; C., Farnham; Catholic, Scarborough.

D.—Dr. A. A. Duke, Littlehampton; Mr. O. J. Davies, Ruardean; Mr. T. Dixon, Lond.; Mr. W. F. Dale, Willing; Doctor, Yetminster; D.P.H., Lowestoft.

E.—Dr. W. McA. Eccles, Lond.; Mr. M. Eaton, Chillington; Eustace, Lond.

F.—Dr. J. Findlay, Penpont; Mr. E. C. Foston, Province Wellesley, Straits Settlements; F., Lond.; Fibula, Lond.; Fidelis, Lond.

G.—Dr. A. Gregor, Sutton-on-Trent; Major-General W. A. Gillespie, Abergavenny; Mr. J. H. Gordon, Porthleven; Gateshead Urban Sanitary Authority, Clerk of; Gentian, Lond.; Globe, Loud.; G.P., Lond.

H.—Dr. W. Hunter, Lond.; Dr. T. W. Hime, Bradford; Mr. W. Henman, Birmingham; Mr. J. Hunt, Ellesmere; Mr. G. J. Hines, Lenham; Mr. W. A. Hardiker, Brymbo; Messrs. Hewlett and Son, Lond.; Messrs. Hardy and Co., Manchester; Horton Infirmary, Banbury, Secretary of; Holiday, Lond.; Homer, Lond.

I.—Dr. W. H. Iddon, Southport.

J.—Dr. D. J. Jones, Blaenavon; Dr. R. W. Jones, Penrhiwceibr; Mr. J. A. Johnston, Middelburg, Cape Colony; Mr. J. E. M. Jenkins, Hadleigh; J. H., Lond.

K.—Mr. J. L. King, Topeka, Kansas, U.S.A.; Kibosh, Lond.

L.—Dr. E. Leeds, Ramsgate; Mr. B. Lord, Manchester.

M.—Dr. H. N. D. Milligan, Bradford, Yorks; Dr. A. H. McMurtry, Belfast; Mr. F. H. Moore, Littleport; Mr. H. L. Mills, Lond.; Medicus, Liverpool; Medicus, Lond.

N.—Noyce, Broughton, Hants.

O.—Dr. W. R. Orr, Sittingbourne; Ophthalmoscope, Eversley.

P.—Mr. H. Powell, Nenagh; Mr. C. Perks, Burton-on-Trent; Messrs. Potter and Sacker, Lond.; Pepsin, Lond.; Pleiades, Lond.; Practitioner, Lond.; Practitioner, Bournemouth; Pill Box, Lond.

Q.—Quest, Lond.

R.—Mr. F. Rhodes, Salford; Rochford Union, Southend-on-Sea, Clerk of; Radius, Lond.; Rubeola, Lond.; R.B., Liverpool; Rota, Lond.

S.—Mr. R. Stoney, Lond.; Mr. A. W. F. Sayres, Wincanton; Mr. L. W. Stevens, Robertson, Cape Colony; Mrs. J. Semple, Harrow; Seawell, Farnham, Surrey; Seaside, Lond.; Southern County, Lond.; Statim, Lond.

T.—Mr. W. Taylor, Norwich; T. A. L. C., Lond.

U.—Urbanus, Lond.

V.—Valens, Lond.

W.—Dr. H. J. Walker, Sketty; Mr. F. Wilson, Lond.

X.—X. Y. Z., Lond.; X, Lond.

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The Manager cannot hold himself responsible for the return of testimonials &c. sent to the Office in reply to advertisements; copies only should be forwarded.

Terms for Serial Insertions may be obtained of the Manager, to whom all letters relating to Advertisements or Subscriptions should be addressed.

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Agent for the Advertisement Department in France—J. ASTIER, 8, Rue Traversière, Asnières, Paris.